Allen-Bradley 1609 UPS Driver

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Help version 1.033

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Overview

The Allen-Bradley 1609 UPS Driver provides a reliable way to connect Allen-Bradley Bulletin 1609 UPS devices to OPC client applications; including HMI, SCADA, Historian, MES, ERP, and countless custom applications. It is intended for use with any device that supports the Simple Network Management Protocol (SNMP) including the Allen-Bradley Bulletin 1609-U500N Ser A UPS.

Setup

Supported Devices
Bulletin 1609 UPS (including 1609-U500N Ser A).
Generic (other SNMP protocol supporting devices).

Communication Protocol
Simple Network Management Protocol (SNMP)

Timing
Connect timeout: 1 to 60 seconds
Request timeout: 100 to 30000 milliseconds
Attempts: 1 to 10

Channel and Device Limits
The maximum number of channels supported by this driver is 100. The maximum number of devices supported by this driver is 100 per channel.

Channel Properties — General

This server supports the use of multiple simultaneous communications drivers. Each protocol or driver used in a server project is called a channel. A server project may consist of many channels with the same communications driver or with unique communications drivers. A channel acts as the basic building block of an OPC link. This group is used to specify general channel properties, such as the identification attributes and operating mode.

Property Groups	Identification	
General	Name	
Write Optimizations	Description	
Advanced	Driver	
	Diagnostics	
	Diagnostics Capture	Disable
	Tag Counts	
	Static Tags	10

Identification

Name: Specify the user-defined identity of this channel. In each server project, each channel name must be unique. Although names can be up to 256 characters, some client applications have a limited display window when browsing the OPC server's tag space. The channel name is part of the OPC browser information. The property is required for creating a channel.
● *For information on reserved characters, refer to "How To... Properly Name a Channel, Device, Tag, and Tag Group" in the server help.*

Description: Specify user-defined information about this channel.
● Many of these properties, including Description, have an associated system tag.

Driver: Specify the protocol / driver for this channel. Specify the device driver that was selected during channel creation. It is a disabled setting in the channel properties. The property is required for creating a channel.
● **Note**: With the server's online full-time operation, these properties can be changed at any time. This includes changing the channel name to prevent clients from registering data with the server. If a client has already acquired an item from the server before the channel name is changed, the items are unaffected. If, after the channel name has been changed, the client application releases the item and attempts to re-acquire using the old channel name, the item is not accepted. Changes to the properties should not be made once a large client application has been developed. Utilize proper user role and privilege management to prevent operators from changing properties or accessing server features.

Diagnostics

Diagnostics Capture: When enabled, this option makes the channel's diagnostic information available to OPC applications. Because the server's diagnostic features require a minimal amount of overhead processing, it is recommended that they be utilized when needed and disabled when not. The default is disabled.
● **Note:** This property is not available if the driver does not support diagnostics.
● *For more information, refer to Communication Diagnostics in the server help.*

Tag Counts

Static Tags: Provides the total number of defined static tags at this level (device or channel). This information can be helpful in troubleshooting and load balancing.

Channel Properties — Ethernet Communications

Ethernet Communication can be used to communicate with devices.

Ethernet Settings

Network Adapter: Specify the network adapter to bind. When left blank or Default is selected, the operating system selects the default adapter.

Channel Properties — Write Optimizations

The server must ensure that the data written from the client application gets to the device on time. Given this goal, the server provides optimization properties to meet specific needs or improve application responsiveness.

Write Optimizations

Optimization Method: Controls how write data is passed to the underlying communications driver. The options are:

- **Write All Values for All Tags**: This option forces the server to attempt to write every value to the controller. In this mode, the server continues to gather write requests and add them to the server's internal write queue. The server processes the write queue and attempts to empty it by writing data to the device as quickly as possible. This mode ensures that everything written from the client applications is sent to the target device. This mode should be selected if the write operation order or the write item's content must uniquely be seen at the target device.
- **Write Only Latest Value for Non-Boolean Tags**: Many consecutive writes to the same value can accumulate in the write queue due to the time required to actually send the data to the device. If the server updates a write value that has already been placed in the write queue, far fewer writes are needed to reach the same final output value. In this way, no extra writes accumulate in the server's queue. When the user stops moving the slide switch, the value in the device is at the correct value at virtually the same time. As the mode states, any value that is not a Boolean value is updated in the server's internal write queue and sent to the device at the next possible opportunity. This can greatly improve the application performance.
 Note: This option does not attempt to optimize writes to Boolean values. It allows users to optimize

the operation of HMI data without causing problems with Boolean operations, such as a momentary push button.

- **Write Only Latest Value for All Tags**: This option takes the theory behind the second optimization mode and applies it to all tags. It is especially useful if the application only needs to send the latest value to the device. This mode optimizes all writes by updating the tags currently in the write queue before they are sent. This is the default mode.

Duty Cycle: is used to control the ratio of write to read operations. The ratio is always based on one read for every one to ten writes. The duty cycle is set to ten by default, meaning that ten writes occur for each read operation. Although the application is performing a large number of continuous writes, it must be ensured that read data is still given time to process. A setting of one results in one read operation for every write operation. If there are no write operations to perform, reads are processed continuously. This allows optimization for applications with continuous writes versus a more balanced back and forth data flow.

⬤ **Note**: It is recommended that the application be characterized for compatibility with the write optimization enhancements before being used in a production environment.

Channel Properties — Advanced

This group is used to specify advanced channel properties. Not all drivers support all properties; so the Advanced group does not appear for those devices.

Property Groups	Non-Normalized Float Handling	
General	Floating-Point Values	Replace with Zero
Write Optimizations	Inter-Device Delay	
Advanced	Inter-Device Delay (ms)	0
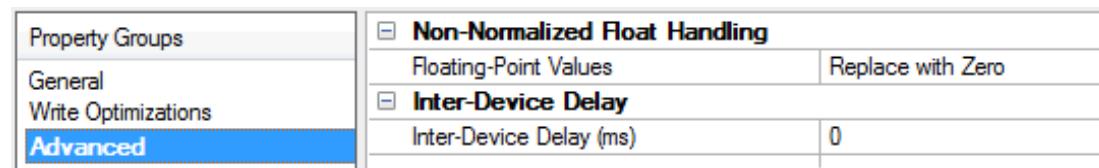
Non-Normalized Float Handling: A non-normalized value is defined as Infinity, Not-a-Number (NaN), or as a Denormalized Number. The default is Replace with Zero. Drivers that have native float handling may default to Unmodified. Non-normalized float handling allows users to specify how a driver handles non-normalized IEEE-754 floating point data. Descriptions of the options are as follows:

- **Replace with Zero**: This option allows a driver to replace non-normalized IEEE-754 floating point values with zero before being transferred to clients.
- **Unmodified**: This option allows a driver to transfer IEEE-754 denormalized, normalized, non-number, and infinity values to clients without any conversion or changes.

⬤ **Note:** This property is disabled if the driver does not support floating-point values or if it only supports the option that is displayed. According to the channel's float normalization setting, only real-time driver tags (such as values and arrays) are subject to float normalization. For example, EFM data is not affected by this setting.

🔹 *For more information on the floating-point values, refer to "How To … Work with Non-Normalized Floating-Point Values" in the server help.*

Inter-Device Delay: Specify the amount of time the communications channel waits to send new requests to the next device after data is received from the current device on the same channel. Zero (0) disables the delay.

⬤ **Note:** This property is not available for all drivers, models, and dependent settings.

Device Properties — General

A device represents a single target on a communications channel. If the driver supports multiple controllers, users must enter a device ID for each controller.

Property Groups	Identification	
General	Name	
Scan Mode	Description	
	Channel Assignment	
	Driver	
	Model	
	ID Format	Decimal
	ID	2

Identification

Name: Specify the name of the device. It is a logical user-defined name that can be up to 256 characters long and may be used on multiple channels.

 Note: Although descriptive names are generally a good idea, some OPC client applications may have a limited display window when browsing the OPC server's tag space. The device name and channel name become part of the browse tree information as well. Within an OPC client, the combination of channel name and device name would appear as "ChannelName.DeviceName".
For more information, refer to "How To... Properly Name a Channel, Device, Tag, and Tag Group" in server help.

Description: Specify the user-defined information about this device.
 Many of these properties, including Description, have an associated system tag.

Channel Assignment: Specify the user-defined name of the channel to which this device currently belongs.

Driver: Selected protocol driver for this device.

Model: Specify the type of device that is associated with this ID. The contents of the drop-down menu depend on the type of communications driver being used. Models that are not supported by a driver are disabled. If the communications driver supports multiple device models, the model selection can only be changed when there are no client applications connected to the device.
 Note: If the communication driver supports multiple models, users should try to match the model selection to the physical device. If the device is not represented in the drop-down menu, select a model that conforms closest to the target device. Some drivers support a model selection called "Open," which allows users to communicate without knowing the specific details of the target device. *For more information, refer to the driver documentation.*

ID: Specify the device's driver-specific station or node. The type of ID entered depends on the communications driver being used. For many communication drivers, the ID is a numeric value. Drivers that support a Numeric ID provide users with the option to enter a numeric value whose format can be changed to suit the needs of the application or the characteristics of the selected communications driver. The format is set by the driver by default. Options include Decimal, Octal, and Hexadecimal.
 Note: If the driver is Ethernet-based or supports an unconventional station or node name, the device's TCP/IP address may be used as the device ID. TCP/IP addresses consist of four values that are separated by periods, with each value in the range of 0 to 255. Some device IDs are string based. There may be additional properties to configure within the ID field, depending on the driver.

Operating Mode

Data Collection: This property controls the device's active state. Although device communications are enabled by default, this property can be used to disable a physical device. Communications are not attempted when a device is disabled. From a client standpoint, the data is marked as invalid and write operations are not accepted. This property can be changed at any time through this property or the device system tags.

Simulated: Place the device into or out of Simulation Mode. In this mode, the driver does not attempt to communicate with the physical device, but the server continues to return valid OPC data. Simulated stops physical communications with the device, but allows OPC data to be returned to the OPC client as valid data. While in Simulation Mode, the server treats all device data as reflective: whatever is written to the simulated device is read back and each OPC item is treated individually. The data is not saved if the server removes the item (such as when the server is reinitialized). The default is No.

⬤ **Notes:**

1. Updates are not applied until clients disconnect and reconnect.

2. The System tag (_Simulated) is read only and cannot be written to for runtime protection. The System tag allows this property to be monitored from the client.

3. In Simulation mode, the item's memory map is based on client update rate(s) (Group Update Rate for OPC clients or Scan Rate for native and DDE interfaces). This means that two clients that reference the same item with different update rates return different data.

4. When a device is simulated, updates may not appear faster than one (1) second in the client.

⬤ Simulation Mode is for test and simulation purposes only. It should never be used in a production environment.

Tag Counts

Static Tags: Provides the total number of defined static tags at this level (device or channel). This information can be helpful in troubleshooting and load balancing.

Device Properties — Scan Mode

The Scan Mode specifies the subscribed-client requested scan rate for tags that require device communications. Synchronous and asynchronous device reads and writes are processed as soon as possible; unaffected by the Scan Mode properties.

Property Groups	⊟ **Scan Mode**	
General	Scan Mode	Respect Client-Specified Scan Rate ▼
Scan Mode	Initial Updates from Cache	Disable

Scan Mode: Specify how tags in the device are scanned for updates sent to subscribing clients. Descriptions of the options are:

- **Respect Client-Specified Scan Rate**: This mode uses the scan rate requested by the client.
- **Request Data No Faster than Scan Rate**: This mode specifies the value set as the maximum scan rate. The valid range is 10 to 99999990 milliseconds. The default is 1000 milliseconds.
  🔘 **Note**: When the server has an active client and items for the device and the scan rate value is increased, the changes take effect immediately. When the scan rate value is decreased, the changes do not take effect until all client applications have been disconnected.
- **Request All Data at Scan Rate**: This mode forces tags to be scanned at the specified rate for subscribed clients. The valid range is 10 to 99999990 milliseconds. The default is 1000 milliseconds.
- **Do Not Scan, Demand Poll Only**: This mode does not periodically poll tags that belong to the device nor perform a read to get an item's initial value once it becomes active. It is the OPC client's responsibility to poll for updates, either by writing to the _DemandPoll tag or by issuing explicit device reads for individual items. *For more information, refer to "Device Demand Poll" in server help*.
- **Respect Tag-Specified Scan Rate**: This mode forces static tags to be scanned at the rate specified in their static configuration tag properties. Dynamic tags are scanned at the client-specified scan rate.

Initial Updates from Cache: When enabled, this option allows the server to provide the first updates for newly activated tag references from stored (cached) data. Cache updates can only be provided when the new item reference shares the same address, scan rate, data type, client access, and scaling properties. A device read is used for the initial update for the first client reference only. The default is disabled; any time a client activates a tag reference the server attempts to read the initial value from the device.

Device Properties — Tag Generation

The automatic tag database generation features make setting up an application a plug-and-play operation. Select communications drivers can be configured to automatically build a list of tags that correspond to device-specific data. These automatically generated tags (which depend on the nature of the supporting driver) can be browsed from the clients.

🔷 *Not all devices and drivers support full automatic tag database generation and not all support the same data types. Consult the data types descriptions or the supported data type lists for each driver for specifics.*

If the target device supports its own local tag database, the driver reads the device's tag information and uses the data to generate tags within the server. If the device does not natively support named tags, the driver creates a list of tags based on driver-specific information. An example of these two conditions is as follows:

1. If a data acquisition system supports its own local tag database, the communications driver uses the tag names found in the device to build the server's tags.

2. If an Ethernet I/O system supports detection of its own available I/O module types, the communications driver automatically generates tags in the server that are based on the types of I/O modules plugged into the Ethernet I/O rack.

⬤ **Note**: Automatic tag database generation's mode of operation is completely configurable. *For more information, refer to the property descriptions below.*

Property Groups	⊟ **Tag Generation**	
General	On Device Startup	Do Not Generate on Startup
Scan Mode	On Duplicate Tag	Delete on Create
Timing	Parent Group	
Auto-Demotion	Allow Automatically Generated Subgroups	Enable
Tag Generation	Create	Create tags
Communications		
Redundancy		

On Property Change: If the device supports automatic tag generation when certain properties change, the **On Property Change** option is shown. It is set to **Yes** by default, but it can be set to **No** to control over when tag generation is performed. In this case, the **Create tags** action must be manually invoked to perform tag generation.

On Device Startup: Specify when OPC tags are automatically generated. Descriptions of the options are as follows:

- **Do Not Generate on Startup**: This option prevents the driver from adding any OPC tags to the tag space of the server. This is the default setting.
- **Always Generate on Startup**: This option causes the driver to evaluate the device for tag information. It also adds tags to the tag space of the server every time the server is launched.
- **Generate on First Startup**: This option causes the driver to evaluate the target device for tag information the first time the project is run. It also adds any OPC tags to the server tag space as needed.

⬤ **Note**: When the option to automatically generate OPC tags is selected, any tags that are added to the server's tag space must be saved with the project. Users can configure the project to automatically save from the **Tools** | **Options** menu.

On Duplicate Tag: When automatic tag database generation is enabled, the server needs to know what to do with the tags that it may have previously added or with tags that have been added or modified after the communications driver since their original creation. This setting controls how the server handles OPC tags that were automatically generated and currently exist in the project. It also prevents automatically generated tags from accumulating in the server.

For example, if a user changes the I/O modules in the rack with the server configured to **Always Generate on Startup**, new tags would be added to the server every time the communications driver detected a new I/O module. If the old tags were not removed, many unused tags could accumulate in the server's tag space. The options are:

- **Delete on Create**: This option deletes any tags that were previously added to the tag space before any new tags are added. This is the default setting.
- **Overwrite as Necessary**: This option instructs the server to only remove the tags that the communications driver is replacing with new tags. Any tags that are not being overwritten remain in the server's tag space.
- **Do not Overwrite**: This option prevents the server from removing any tags that were previously generated or already existed in the server. The communications driver can only add tags that are completely new.

- **Do not Overwrite, Log Error**: This option has the same effect as the prior option, and also posts an error message to the server's Event Log when a tag overwrite would have occurred.

⬥ **Note:** Removing OPC tags affects tags that have been automatically generated by the communications driver as well as any tags that have been added using names that match generated tags. Users should avoid adding tags to the server using names that may match tags that are automatically generated by the driver.

Parent Group: This property keeps automatically generated tags from mixing with tags that have been entered manually by specifying a group to be used for automatically generated tags. The name of the group can be up to 256 characters. This parent group provides a root branch to which all automatically generated tags are added.

Allow Automatically Generated Subgroups: This property controls whether the server automatically creates subgroups for the automatically generated tags. This is the default setting. If disabled, the server generates the device's tags in a flat list without any grouping. In the server project, the resulting tags are named with the address value. For example, the tag names are not retained during the generation process.
⬥ **Note**: If, as the server is generating tags, a tag is assigned the same name as an existing tag, the system automatically increments to the next highest number so that the tag name is not duplicated. For example, if the generation process creates a tag named "AI22" that already exists, it creates the tag as "AI23" instead.

Create: Initiates the creation of automatically generated OPC tags. If the device's configuration has been modified, **Create tags** forces the driver to reevaluate the device for possible tag changes. Its ability to be accessed from the System tags allows a client application to initiate tag database creation.
⬥ **Note**: **Create tags** is disabled if the Configuration edits a project offline.

Device Properties — Timing

The device Timing properties allow the driver's response to error conditions to be tailored to fit the application's needs. In many cases, the environment requires changes to these properties for optimum performance. Factors such as electrically generated noise, modem delays, and poor physical connections can influence how many errors or timeouts a communications driver encounters. Timing properties are specific to each configured device.
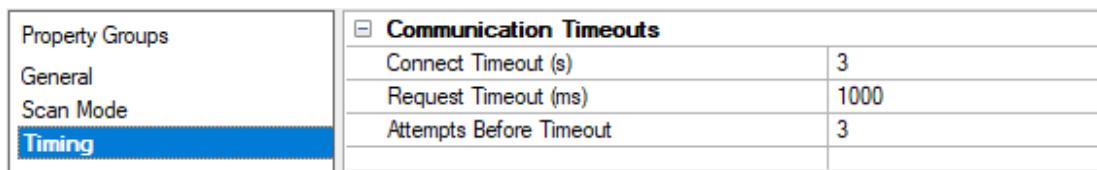
Property Groups	Communication Timeouts	
General	Connect Timeout (s)	3
Scan Mode	Request Timeout (ms)	1000
Timing	Attempts Before Timeout	3

Communications Timeouts

Connect Timeout: This property (which is used primarily by Ethernet based drivers) controls the amount of time required to establish a socket connection to a remote device. The device's connection time often takes longer than normal communications requests to that same device. The valid range is 1 to 30 seconds. The default is typically 3 seconds, but can vary depending on the driver's specific nature. If this setting is not supported by the driver, it is disabled.
⬥ **Note**: Due to the nature of UDP connections, the connection timeout setting is not applicable when communicating via UDP.

Request Timeout: Specify an interval used by all drivers to determine how long the driver waits for a response from the target device to complete. The valid range is 50 to 9999999 milliseconds (167 minutes).

The default is usually 1000 milliseconds, but can vary depending on the driver. The default timeout for most serial drivers is based on a baud rate of 9600 baud or better. When using a driver at lower baud rates, increase the timeout to compensate for the increased time required to acquire data.

Attempts Before Timeout: Specify how many times the driver issues a communications request before considering the request to have failed and the device to be in error. The valid range is 1 to 10. The default is typically 3, but can vary depending on the driver's specific nature. The number of attempts configured for an application depends largely on the communications environment. This property applies to both connection attempts and request attempts.

Timing

Inter-Request Delay: Specify how long the driver waits before sending the next request to the target device. It overrides the normal polling frequency of tags associated with the device, as well as one-time reads and writes. This delay can be useful when dealing with devices with slow turnaround times and in cases where network load is a concern. Configuring a delay for a device affects communications with all other devices on the channel. It is recommended that users separate any device that requires an inter-request delay to a separate channel if possible. Other communications properties (such as communication serialization) can extend this delay. The valid range is 0 to 300,000 milliseconds; however, some drivers may limit the maximum value due to a function of their particular design. The default is 0, which indicates no delay between requests with the target device.

⬤ **Note**: Not all drivers support Inter-Request Delay. This setting does not appear if it is not available.

Property Groups	Timing	
General	Inter-Request Delay (ms)	0
Scan Mode		
Timing		
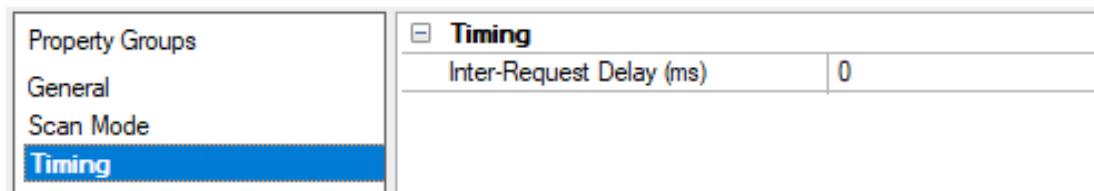
Device Properties — Auto-Demotion

The Auto-Demotion properties can temporarily place a device off-scan in the event that a device is not responding. By placing a non-responsive device offline for a specific time period, the driver can continue to optimize its communications with other devices on the same channel. After the time period has been reached, the driver re-attempts to communicate with the non-responsive device. If the device is responsive, the device is placed on-scan; otherwise, it restarts its off-scan time period.

Property Groups	Auto-Demotion	
General	Demote on Failure	**Enable**
Scan Mode	Timeouts to Demote	3
Timing	Demotion Period (ms)	10000
Auto-Demotion	Discard Requests when Demoted	Disable
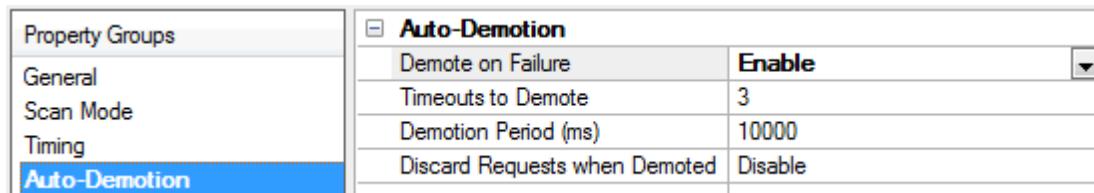
Demote on Failure: When enabled, the device is automatically taken off-scan until it is responding again.

🌿 **Tip**: Determine when a device is off-scan by monitoring its demoted state using the _AutoDemoted system tag.

Timeouts to Demote: Specify how many successive cycles of request timeouts and retries occur before the device is placed off-scan. The valid range is 1 to 30 successive failures. The default is 3.

Demotion Period: Indicate how long the device should be placed off-scan when the timeouts value is reached. During this period, no read requests are sent to the device and all data associated with the read requests are set to bad quality. When this period expires, the driver places the device on-scan and allows for another attempt at communications. The valid range is 100 to 3600000 milliseconds. The default is 10000 milliseconds.

Discard Requests when Demoted: Select whether or not write requests should be attempted during the off-scan period. Disable to always send write requests regardless of the demotion period. Enable to discard writes; the server automatically fails any write request received from a client and does not post a message to the Event Log.

Device Properties — Communication Parameters

Port: This property specifies the port number that the remote device is configured to use. The default port number is 161, which is the standard SNMP port.

IP Protocol: The Allen-Bradley 1609 UPS Driver connects to supported devices using User Datagram Protocol (UDP). Winsock V1.1 or higher is required.

Device Properties — Community Setup

Community specifies the name of the SNMP community, which is a group of devices (SNMP agents) and management stations (SNMP managers). There are two types of communities: Private and Public. The default setting is private. If the Community property is set to Custom, users can enter a different name using the Custom Community field.

SNMP Communities

A device can be configured to belong to multiple communities. In the Allen-Bradley 1609 UPS Driver, the community name functions as a password to authenticate messages sent between a management station

and a device. The device will not respond to requests from management stations that do not belong to one of the communities configured for that device. The default SNMP communities are as follows:

Write = Private
Read = Public

When a device (SNMP agent) receives a request, it checks the community name.

- The device responds to SNMP Get and Get-next requests if the community name matches a Read Only community to which the device belongs.
- The device responds to SNMP Get, Get-next, and Set requests if the community name matches a Read/Write community to which the device belongs.

Device Properties — Maximum Request Size

Number of Items/Message: Allen-Bradley 1609 UPS Driver utilizes multiple-items request in the SNMP protocol. This property specifies how many items to fetch per request. The default setting is 25.

Device Properties — Error Handling

The Allen-Bradley 1609 UPS Driver automatically generates tags when the Bulletin 1609 model is selected. The auto-generation process uses a fixed database and may generate tags that do not exist in the device. As a result, the SNMP agent running in the device will return "NO SUCH NAME" errors that will be written in the server log.

Post Error Messages for Non-Existing Tags: When disabled, the server error log will be kept clear of numerous "NO SUCH NAME" errors. When enabled, all "NO SUCH NAME" errors that are returned during automatic tag generation will be written to the server error log. The default setting is disabled.

Note: Tags are not generated when the Generic Model is selected.

🌀 *See Also*: *Automatic Tag Database Generation*

Device Properties — Redundancy

Property Groups	Redundancy	
General	Secondary Path	**Channel.Device1** ...
Scan Mode	Operating Mode	Switch On Failure
Timing	Monitor Item	
Auto-Demotion	Monitor Interval (s)	300
Tag Generation	Return to Primary ASAP	Yes
Tag Import Settings		
Redundancy		

Redundancy is available with the Media-Level Redundancy Plug-In.

🔷 *Consult the website, a sales representative, or the* **user manual** *for more information.*

Automatic Tag Database Generation

The Allen-Bradley 1609 UPS Driver utilizes the OPC server's automatic tag database generation feature, which enables drivers to automatically create tags using a fixed database. Automatic tag database generation only occurs when the Bulletin 1609 UPS model is selected. It will not occur if the Generic Model is selected.

Group and Tag Naming

A tag group is created for each of the groups listed in **Address Descriptions**.

The following figure illustrates the results of automatic tag database creation.

Tag Name	Address
sysDescr	1.3.6.1.2.1.1.1.0:0
sysObjectID	1.3.6.1.2.1.1.2.0:0
sysUpTime	1.3.6.1.2.1.1.3.0:0
sysContact	1.3.6.1.2.1.1.4.0:0
sysName	1.3.6.1.2.1.1.5.0:0
sysLocation	1.3.6.1.2.1.1.6.0:0
sysServices	1.3.6.1.2.1.1.7.0:0
snmpInPkts	1.3.6.1.2.1.11.1.0:0
snmpInBadValues	1.3.6.1.2.1.11.10.0:0
snmpInReadOnlys	1.3.6.1.2.1.11.11.0:0
snmpInGenErrs	1.3.6.1.2.1.11.12.0:0
snmpInTotalReqVars	1.3.6.1.2.1.11.13.0:0
snmpInTotalSetVars	1.3.6.1.2.1.11.14.0:0
snmpInGetRequests	1.3.6.1.2.1.11.15.0:0
snmpInGetNexts	1.3.6.1.2.1.11.16.0:0
snmpInSetRequests	1.3.6.1.2.1.11.17.0:0
snmpInGetResponses	1.3.6.1.2.1.11.18.0:0

�') *See Also:* **Nonexistent Tag Error Posting**

Data Types Description

The SNMP protocol supports numerous data types. While the Allen-Bradley 1609 UPS Driver does not support all SNMP data types, some have been mapped to the closest primitive data types. The 1609 model currently supports the following SNMP data types:

- IPADDRESS (mapped as STRING)
- NSAPADDRESS (mapped as STRING)
- OBJECTIDENTIFIER (mapped as STRING)
- OCTETSTRING (mapped as STRING)
- TIMETICKS (mapped as DWORD)
- COUNTER32 (mapped as DWORD)
- GAUGE (mapped as DWORD)
- INTEGER (mapped as LONG)

Data Type	Description
Word	Read: Unsigned 16 bit value read from device. Write: Value passed directly on to device.
DWord	Read: Unsigned 32 bit value read from device. Write: Value passed directly on to device.
Long	Read: Signed 32 bit value read from device. Write: Value passed directly on to device.
Short	Read: Signed 16 bit value read from device. Write: Value passed directly on to device.
String	Read: Reads maximum of 255 characters. Write: Value passed directly on to device.

Address Descriptions for Generic Model

The Allen-Bradley 1609 UPS Driver supports devices that fall under the iso:identified-organization namespace. Therefore, all addresses (or Object IDs) for accessing object data in this driver must start with the 1.3 prefix that denotes the iso:identified-organization namespace. The addresses syntax is as follows:

1.3.[X.Y.Z.....]:nOffset

where X, Y and Z mean any number in the range of 0 to 65535 and "..." means the sequence can go on forever (provided that the length of the whole address does not exceed 64 characters). The offset range is 0 to 25.

Primitive Single-Instance Leaf Objects and Columnar Leaf Objects

There are two types of objects in SNMP: Primitive Single-Instance Leaf Objects and Columnar Leaf Objects. Primitive single-instance objects can be accessed by their Object ID, whereas columnar leaf objects require a table index that is determined by the address's nOffset. When accessing a primitive single-instance leaf object, the nOffset must be zero. When accessing a columnar leaf object, the nOffset must be the index in its tree.

Primitive Single-Instance Leaf Object ID Example
1.3.6.1.4.1.318.2.1.6.2.0:0

where 1.3.6.1.4.1.318.2.1.6.2.0 is the Object ID and 0 is the offset.

Columnar Leaf Object ID Example
1.3.6.1.4.1.318.2.1.2.1.2:1

where 1.3.6.1.4.1.318.2.1.2.1.2 is the Object ID and 1 is the offset.

⬤ **Note**: The Generic Model objects' data type is set to DWord by default. It may be changed to Word or String at users' discretion. For information on the correct data types, refer to the device's user manual.

Address Descriptions for Bulletin 1609 Model

In the Allen-Bradley 1609 UPS Driver, object data in SNMP devices can be accessed using the syntax described in **Generic Model Addressing**. Tags for the Bulletin 1609 model are auto-generated and categorized under groups. The groups are shown in alphabetical order.

Group: None

Tag Name	Object ID	Data Type	Access
nomeIdentName	1.3.6.1.4.1.318.1.1.13.1.1.0:0	**String**	Read Only
serialPort2Mode	1.3.6.1.4.1.318.1.1.3.1.2.1.1.0:0	**Long**	Read/Write
setPulseOnTXD	1.3.6.1.4.1.318.1.1.3.1.2.2.1.0:0	**Long**	Read/Write
upsCommStatus	1.3.6.1.4.1.318.1.1.1.8.1.0:0	**Long**	Read Only

Group: System

Tag Name	Object ID	Data Type	Access
egpAs	1.3.6.1.2.1.8.6.0:0	**Long**	Read Only
egpInErrors	1.3.6.1.2.1.8.2.0:0	**DWord**	Read Only
egpInMsgs	1.3.6.1.2.1.8.1.0:0	**DWord**	Read Only
egpNeighAddr_01	1.3.6.1.2.1.8.5.1.2:1	**DWord**	Read Only
egpNeighAs_01	1.3.6.1.2.1.8.5.1.3:1	**Long**	Read Only
egpNeighEventTrigger_01	1.3.6.1.2.1.8.5.1.15:1	**Long**	Read/Write
egpNeighInErrMsgs_01	1.3.6.1.2.1.8.5.1.8:1	**DWord**	Read Only
egpNeighInErrs_01	1.3.6.1.2.1.8.5.1.5:1	**DWord**	Read Only
egpNeighInMsgs_01	1.3.6.1.2.1.8.5.1.4:1	**DWord**	Read Only
egpNeighIntervalHello_01	1.3.6.1.2.1.8.5.1.12:1	**Long**	Read Only
egpNeighIntervalPoll_01	1.3.6.1.2.1.8.5.1.13:1	**Long**	Read Only
egpNeighMode_01	1.3.6.1.2.1.8.5.1.14:1	**Long**	Read Only
egpNeighOutErrMsgs_01	1.3.6.1.2.1.8.5.1.9:1	**DWord**	Read Only
egpNeighOutErrs_01	1.3.6.1.2.1.8.5.1.7:1	**DWord**	Read Only
egpNeighOutMsgs_01	1.3.6.1.2.1.8.5.1.6:1	**DWord**	Read Only
egpNeighState_01	1.3.6.1.2.1.8.5.1.1:1	**Long**	Read Only
egpNeighStateDowns_01	1.3.6.1.2.1.8.5.1.11:1	**DWord**	Read Only
egpNeighStateUps_01	1.3.6.1.2.1.8.5.1.10:1	**DWORD**	Read Only

Tag Name	Object ID	Data Type	Access
egpOutErrors	1.3.6.1.2.1.8.4.0:0	**DWord**	Read Only
icmpInAddrMaskReps	1.3.6.1.2.1.5.13.0:0	**DWord**	Read Only
icmpInAddrMasks	1.3.6.1.2.1.5.12.0:0	**DWord**	Read Only
icmpInDestUnreachs	1.3.6.1.2.1.5.3.0:0	**DWord**	Read Only
icmpInEchoReps	1.3.6.1.2.1.5.9.0:0	**DWord**	Read Only
icmpInEchos	1.3.6.1.2.1.5.8.0:0	**DWord**	Read Only
icmpInErrors	1.3.6.1.2.1.5.2.0:0	**DWord**	Read Only
icmpInMsgs	1.3.6.1.2.1.5.1.0:0	**DWord**	Read Only
icmpInParmProbs	1.3.6.1.2.1.5.5.0:0	**DWord**	Read Only
icmpInRedirects	1.3.6.1.2.1.5.7.0:0	**DWord**	Read Only
icmpInSrcQuenchs	1.3.6.1.2.1.5.6.0:0	**DWord**	Read Only
icmpInTimeExcds	1.3.6.1.2.1.5.4.0:0	**DWord**	Read Only
icmpInTimestampReps	1.3.6.1.2.1.5.11.0:0	**DWord**	Read Only
icmpInTimestamps	1.3.6.1.2.1.5.10.0:0	**DWord**	Read Only
icmpOutAddrMaskReps	1.3.6.1.2.1.5.26.0:0	**DWord**	Read Only
icmpOutAddrMasks	1.3.6.1.2.1.5.25.0:0	**DWord**	Read Only
icmpOutDestUnreachs	1.3.6.1.2.1.5.16.0:0	**DWord**	Read Only
icmpOutEchoReps	1.3.6.1.2.1.5.22.0:0	**DWord**	Read Only
icmpOutEchos	1.3.6.1.2.1.5.21.0:0	**DWord**	Read Only
icmpOutErrors	1.3.6.1.2.1.5.15.0:0	**DWord**	Read Only
icmpOutMsgs	1.3.6.1.2.1.5.14.0:0	**DWord**	Read Only
icmpOutParmProbs	1.3.6.1.2.1.5.18.0:0	**DWord**	Read Only
icmpOutRedirects	1.3.6.1.2.1.5.20.0:0	**DWord**	Read Only
icmpOutSrcQuenchs	1.3.6.1.2.1.5.19.0:0	**DWord**	Read Only
icmpOutTimeExcds	1.3.6.1.2.1.5.17.0:0	**DWord**	Read Only
icmpOutTimestampReps	1.3.6.1.2.1.5.24.0:0	**DWord**	Read Only
icmpOutTimestamps	1.3.6.1.2.1.5.23.0:0	**DWord**	Read Only
ifAdminStatus_01	1.3.6.1.2.1.2.2.1.7.1:0	**Long**	Read/Write
ifDescr_01	1.3.6.1.2.1.2.2.1.2.1:0	**String**	Read Only
ifIndex_01	1.3.6.1.2.1.2.2.1.1.1:0	**Long**	Read Only
ifInDiscards_01	1.3.6.1.2.1.2.2.1.13.1:0	**DWord**	Read Only
ifInErrors_01	1.3.6.1.2.1.2.2.1.14.1:0	**DWord**	Read Only
ifInNUcastPkts_01	1.3.6.1.2.1.2.2.1.12.1:0	**DWord**	Read Only
ifInOctets_01	1.3.6.1.2.1.2.2.1.10.1:0	**DWord**	Read Only
ifInUcastPkts_01	1.3.6.1.2.1.2.2.1.11.1:0	**DWord**	Read Only
ifInUnknownProtos_01	1.3.6.1.2.1.2.2.1.15.1:0	**DWord**	Read Only
ifLastChange_01	1.3.6.1.2.1.2.2.1.9.1:0	**DWord**	Read Only
ifMtu_01	1.3.6.1.2.1.2.2.1.4.1:0	**Long**	Read Only
ifNumber	1.3.6.1.2.1.2.1.0:0	**Long**	Read Only

Tag Name	Object ID	Data Type	Access
ifOperStatus_01	1.3.6.1.2.1.2.2.1.8.1:0	**Long**	Read Only
ifOutDiscards_01	1.3.6.1.2.1.2.2.1.19.1:0	**DWord**	Read Only
ifOutErrors_01	1.3.6.1.2.1.2.2.1.20.1:0	**DWord**	Read Only
ifOutNUcastPkts_01	1.3.6.1.2.1.2.2.1.18.1:0	**DWord**	Read Only
ifOutOctets_01	1.3.6.1.2.1.2.2.1.16.1:0	**DWord**	Read Only
ifOutQLen_01	1.3.6.1.2.1.2.2.1.21.1:0	**DWord**	Read Only
ifOutUcastPkts_01	1.3.6.1.2.1.2.2.1.17.1:0	**DWord**	Read Only
ifPhysAddress_01	1.3.6.1.2.1.2.2.1.6.1:0	**String**	Read Only
ifSpecific_01	1.3.6.1.2.1.2.2.1.22.1:0	**String**	Read Only
ifSpeed_01	1.3.6.1.2.1.2.2.1.5.1:0	**DWord**	Read Only
ifType_01	1.3.6.1.2.1.2.2.1.3.1:0	**Long**	Read Only
ipAdEntAddr_01	1.3.6.1.2.1.4.20.1.1:1	**String**	Read Only
ipAdEntBcastAddr_01	1.3.6.1.2.1.4.20.1.4:1	**Long**	Read Only
ipAdEntIfIndex_01	1.3.6.1.2.1.4.20.1.2:1	**Long**	Read Only
ipAdEntNetMask_01	1.3.6.1.2.1.4.20.1.3:1	**String**	Read Only
ipAdEntReasmMaxSize_01	1.3.6.1.2.1.4.20.1.5:1	**Long**	Read Only
ipDefaultTTL	1.3.6.1.2.1.4.2.0:0	**Long**	Read/Write
ipForwarding	1.3.6.1.2.1.4.1.0:0	**Long**	Read/Write
ipForwDatagrams	1.3.6.1.2.1.4.6.0:0	**DWord**	Read Only
ipFragCreates	1.3.6.1.2.1.4.19.0:0	**DWord**	Read Only
ipFragFails	1.3.6.1.2.1.4.18.0:0	**DWord**	Read Only
ipFragOKs	1.3.6.1.2.1.4.17.0:0	**DWord**	Read Only
ipInAddrErrors	1.3.6.1.2.1.4.5.0:0	**DWord**	Read Only
ipInDelivers	1.3.6.1.2.1.4.9.0:0	**DWord**	Read Only
ipInDiscards	1.3.6.1.2.1.4.8.0:0	**DWord**	Read Only
ipInHdrErrors	1.3.6.1.2.1.4.4.0:0	**DWord**	Read Only
ipInReceives	1.3.6.1.2.1.4.3.0:0	**DWord**	Read Only
ipInUnknownProtos	1.3.6.1.2.1.4.7.0:0	**DWord**	Read Only
ipNetToMediaIfIndex_01	1.3.6.1.2.1.4.22.1.1:1	**Long**	Read/Write
ipNetToMediaNetAddress_01	1.3.6.1.2.1.4.22.1.3:1	**String**	Read/Write
ipNetToMediaPhysAddress_01	1.3.6.1.2.1.4.22.1.2:1	**String**	Read/Write
ipNetToMediaType_01	1.3.6.1.2.1.4.22.1.4:1	**Long**	Read/Write
ipOutDiscards	1.3.6.1.2.1.4.11.0:0	**DWord**	Read Only
ipOutNoRoutes	1.3.6.1.2.1.4.12.0:0	**DWord**	Read Only
ipOutRequests	1.3.6.1.2.1.4.10.0:0	**DWord**	Read Only
ipReasmFails	1.3.6.1.2.1.4.16.0:0	**DWord**	Read Only
ipReasmOKs	1.3.6.1.2.1.4.15.0:0	**DWord**	Read Only
ipReasmReqds	1.3.6.1.2.1.4.14.0:0	**DWord**	Read Only
ipReasmTimeout	1.3.6.1.2.1.4.13.0:0	**Long**	Read Only

Tag Name	Object ID	Data Type	Access
ipRouteAge_01	1.3.6.1.2.1.4.21.1.10:1	**Long**	Read/Write
ipRouteDest_01	1.3.6.1.2.1.4.21.1.1:1	**String**	Read/Write
ipRouteIfIndex_01	1.3.6.1.2.1.4.21.1.2:1	**Long**	Read/Write
ipRouteInfo_01	1.3.6.1.2.1.4.21.1.13:1	**String**	Read Only
ipRouteMask_01	1.3.6.1.2.1.4.21.1.11:1	**String**	Read/Write
ipRouteMetric1_01	1.3.6.1.2.1.4.21.1.3:1	**Long**	Read/Write
ipRouteMetric2_01	1.3.6.1.2.1.4.21.1.4:1	**Long**	Read/Write
ipRouteMetric3_01	1.3.6.1.2.1.4.21.1.5:1	**Long**	Read/Write
ipRouteMetric4_01	1.3.6.1.2.1.4.21.1.6:1	**Long**	Read/Write
ipRouteMetric5_01	1.3.6.1.2.1.4.21.1.12:1	**Long**	Read/Write
ipRouteNextHop_01	1.3.6.1.2.1.4.21.1.7:1	**String**	Read/Write
ipRouteProto_01	1.3.6.1.2.1.4.21.1.9:1	**Long**	Read Only
ipRouteType_01	1.3.6.1.2.1.4.21.1.8:1	**Long**	Read/Write
ipRoutingDiscards	1.3.6.1.2.1.4.23.0:0	**DWord**	Read Only
snmpEnableAuthenTraps	1.3.6.1.2.1.11.30.0:0	**Long**	Read/Write
snmpInASNParseErrs	1.3.6.1.2.1.11.6.0:0	**DWord**	Read Only
snmpInBadCommunityNames	1.3.6.1.2.1.11.4.0:0	**DWord**	Read Only
snmpInBadCommunityUses	1.3.6.1.2.1.11.5.0:0	**DWord**	Read Only
snmpInBadValues	1.3.6.1.2.1.11.10.0:0	**DWord**	Read Only
snmpInBadVersions	1.3.6.1.2.1.11.3.0:0	**DWord**	Read Only
snmpInGenErrs	1.3.6.1.2.1.11.12.0:0	**DWord**	Read Only
snmpInGetNexts	1.3.6.1.2.1.11.16.0:0	**DWord**	Read Only
snmpInGetRequests	1.3.6.1.2.1.11.15.0:0	**DWord**	Read Only
snmpInGetResponses	1.3.6.1.2.1.11.18.0:0	**DWord**	Read Only
snmpInNoSuchNames	1.3.6.1.2.1.11.9.0:0	**DWord**	Read Only
snmpInPkts	1.3.6.1.2.1.11.1.0:0	**DWord**	Read Only
snmpInReadOnlys	1.3.6.1.2.1.11.11.0:0	**DWord**	Read Only
snmpInSetRequests	1.3.6.1.2.1.11.17.0:0	**DWord**	Read Only
snmpInTooBigs	1.3.6.1.2.1.11.8.0:0	**DWord**	Read Only
snmpInTotalReqVars	1.3.6.1.2.1.11.13.0:0	**DWord**	Read Only
snmpInTotalSetVars	1.3.6.1.2.1.11.14.0:0	**DWord**	Read Only
snmpInTraps	1.3.6.1.2.1.11.19.0:0	**DWord**	Read Only
snmpOutBadValues	1.3.6.1.2.1.11.22.0:0	**DWord**	Read Only
snmpOutGenErrs	1.3.6.1.2.1.11.24.0:0	**DWord**	Read Only
snmpOutGetNexts	1.3.6.1.2.1.11.26.0:0	**DWord**	Read Only
snmpOutGetRequests	1.3.6.1.2.1.11.25.0:0	**DWord**	Read Only
snmpOutGetResponses	1.3.6.1.2.1.11.28.0:0	**DWord**	Read Only
snmpOutNoSuchNames	1.3.6.1.2.1.11.21.0:0	**DWord**	Read Only
snmpOutPkts	1.3.6.1.2.1.11.2.0:0	**DWord**	Read Only

Tag Name	Object ID	Data Type	Access
snmpOutSetRequests	1.3.6.1.2.1.11.27.0:0	**DWord**	Read Only
snmpOutTooBigs	1.3.6.1.2.1.11.20.0:0	**DWord**	Read Only
snmpOutTraps	1.3.6.1.2.1.11.29.0:0	**DWord**	Read Only
sysContact	1.3.6.1.2.1.1.4.0:0	**String**	Read/Write
sysDescr	1.3.6.1.2.1.1.1.0:0	**String**	Read Only
sysLocation	1.3.6.1.2.1.1.6.0:0	**String**	Read/Write
sysName	1.3.6.1.2.1.1.5.0:0	**String**	Read/Write
sysObjectID	1.3.6.1.2.1.1.2.0:0	**String**	Read Only
sysServices	1.3.6.1.2.1.1.7.0:0	**Long**	Read Only
sysUpTime	1.3.6.1.2.1.1.3.0:0	**DWord**	Read Only
tcpActiveOpens	1.3.6.1.2.1.6.5.0:0	**DWord**	Read Only
tcpAttemptFails	1.3.6.1.2.1.6.7.0:0	**DWord**	Read Only
tcpConnLocalAddress_01	1.3.6.1.2.1.6.13.1.2:1	**String**	Read Only
tcpConnLocalPort_01	1.3.6.1.2.1.6.13.1.3:1	**Long**	Read Only
tcpConnRemAddress_01	1.3.6.1.2.1.6.13.1.4:1	**String**	Read Only
tcpConnRemPort_01	1.3.6.1.2.1.6.13.1.5:1	**Long**	Read Only
tcpConnState_01	1.3.6.1.2.1.6.13.1.1:1	**Long**	Read/Write
tcpCurrEstab	1.3.6.1.2.1.6.9.0:0	**DWord**	Read Only
tcpEstabResets	1.3.6.1.2.1.6.8.0:0	**DWord**	Read Only
tcpInErrs	1.3.6.1.2.1.6.14.0:0	**DWord**	Read Only
tcpInSegs	1.3.6.1.2.1.6.10.0:0	**DWord**	Read Only
tcpMaxConn	1.3.6.1.2.1.6.4.0:0	**Long**	Read Only
tcpOutRsts	1.3.6.1.2.1.6.15.0:0	**DWord**	Read Only
tcpOutSegs	1.3.6.1.2.1.6.11.0:0	**DWord**	Read Only
tcpPassiveOpens	1.3.6.1.2.1.6.6.0:0	**DWord**	Read Only
tcpRetransSegs	1.3.6.1.2.1.6.12.0:0	**DWord**	Read Only
tcpRtoAlgorithm	1.3.6.1.2.1.6.1.0:0	**Long**	Read Only
tcpRtoMax	1.3.6.1.2.1.6.3.0:0	**Long**	Read Only
tcpRtoMin	1.3.6.1.2.1.6.2.0:0	**Long**	Read Only
udpInDatagrams	1.3.6.1.2.1.7.1.0:0	**DWord**	Read Only
udpInErrors	1.3.6.1.2.1.7.3.0:0	**DWord**	Read Only
udpLocalAddress_01	1.3.6.1.2.1.7.5.1.1:1	**String**	Read Only
udpLocalPort_01	1.3.6.1.2.1.7.5.1.2:1	**Long**	Read Only
udpNoPorts	1.3.6.1.2.1.7.2.0:0	**DWord**	Read Only
udpOutDatagrams	1.3.6.1.2.1.7.4.0:0	**DWord**	Read Only
egpOutMsgs	1.3.6.1.2.1.8.3.0:0	**DWord**	Read Only
sysTrap	1.3.6.1.2.1.11:TV	**Long**	Read Only

Group: UPSATSCALIB

Tag Name	Object ID	Data Type	Access
Calibration.atsCalibrationNumInputPhases	1.3.6.1.4.1.318.1.1.8.2.1.2.0:0	**Long**	Read Only
Calibration.atsCalibrationNumInputs	1.3.6.1.4.1.318.1.1.8.2.1.1.0:0	**Long**	Read Only
Calibration.atsCalibrationNumOutputPhases	1.3.6.1.4.1.318.1.1.8.2.3.2.0:0	**Long**	Read Only
Calibration.atsCalibrationNumOutputs	1.3.6.1.4.1.318.1.1.8.2.3.1.0:0	**Long**	Read Only
Calibration.atsCalibrationPowerSupplyVoltages	1.3.6.1.4.1.318.1.1.8.2.2.1.0:0	**Long**	Read Only

Group: UPSATSCNFG

Tag Name	Object ID	Data Type	Access
Config.atsConfigCurrentLimit	1.3.6.1.4.1.318.1.1.8.4.6.0:0	**Long**	Read/Write
Config.atsConfigFrontPanelLockout	1.3.6.1.4.1.318.1.1.8.4.3.0:0	**Long**	Read/Write
Config.atsConfigPreferredSource	1.3.6.1.4.1.318.1.1.8.4.2.0:0	**Long**	Read/Write
Config.atsConfigProductName	1.3.6.1.4.1.318.1.1.8.4.1.0:0	**String**	Read/Write
Config.atsConfigResetValues	1.3.6.1.4.1.318.1.1.8.4.7.0:0	**Long**	Read/Write
Config.atsConfigTransferVoltageRange	1.3.6.1.4.1.318.1.1.8.4.5.0:0	**Long**	Read/Write
Config.atsConfigVoltageSensitivity	1.3.6.1.4.1.318.1.1.8.4.4.0:0	**Long**	Read/Write

Group: UPSATSCNTRL

Tag Name	Object ID	Data Type	Access
Control.atsControlClearAllAlarms	1.3.6.1.4.1.318.1.1.8.3.2.0:0	**Long**	Read/Write
Control.atsControlResetATS	1.3.6.1.4.1.318.1.1.8.3.1.0:0	**Long**	Read/Write

Group: UPSATSSTATUS

Tag Name	Object ID	Data Type	Access
Status.atsStatus24VPowerSupply	1.3.6.1.4.1.318.1.1.8.5.1.6.0:0	**Long**	Read Only
Status.atsStatus5VPowerSupply	1.3.6.1.4.1.318.1.1.8.5.1.5.0:0	**Long**	Read Only
Status.atsStatusCommStatus	1.3.6.1.4.1.318.1.1.8.5.1.1.0:0	**Long**	Read Only
Status.atsStatusOverCurrentState	1.3.6.1.4.1.318.1.1.8.5.1.4.0:0	**Long**	Read Only
Status.atsStatusRedundancyState	1.3.6.1.4.1.318.1.1.8.5.1.3.0:0	**Long**	Read Only
Status.atsStatusResetMaxMinValues	1.3.6.1.4.1.318.1.1.8.5.2.1.0:0	**Long**	Read/Write
Status.atsStatusSelectedSource	1.3.6.1.4.1.318.1.1.8.5.1.2.0:0	**Long**	Read Only

Group: UPSBATTERY

Tag Name	Object ID	Data Type	Access
upsAdvBatteryCapacity	1.3.6.1.4.1.318.1.1.1.2.2.1.0:0	**DWord**	Read Only
upsAdvBatteryNumOfBadBattPacks	1.3.6.1.4.1.318.1.1.1.2.2.6.0:0	**Long**	Read Only
upsAdvBatteryNumOfBattPacks	1.3.6.1.4.1.318.1.1.1.2.2.5.0:0	**Long**	Read Only
upsAdvBatteryReplaceIndicator	1.3.6.1.4.1.318.1.1.1.2.2.4.0:0	**Long**	Read Only
upsAdvBatteryRunTimeRemaining	1.3.6.1.4.1.318.1.1.1.2.2.3.0:0	**DWord**	Read Only

Tag Name	Object ID	Data Type	Access
upsAdvBatteryTemperature	1.3.6.1.4.1.318.1.1.1.2.2.2.0:0	**DWord**	Read Only
upsBasicBatteryLastReplaceDATE	1.3.6.1.4.1.318.1.1.1.2.1.3.0:0	**String**	Read/Write
upsBasicBatteryStatus	1.3.6.1.4.1.318.1.1.1.2.1.1.0:0	**Long**	Read Only
upsBasicBatteryTimeOnBattery	1.3.6.1.4.1.318.1.1.1.2.1.2.0:0	**DWord**	Read Only

Group: UPSCNFGADV

Tag Name	Object ID	Data Type	Access
Advanced.apcUpsConfigFieldIndex_01	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:1	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_02	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:2	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_03	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:3	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_04	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:4	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_05	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:5	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_06	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:6	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_07	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:7	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_08	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:8	**Long**	Read Only
Advanced.apcUpsConfigFieldIndex_09	1.3.6.1.4.1.318.1.1.1.5.2.16.1.1:9	**Long**	Read Only
Advanced.apcUpsConfigFieldOID_01	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:1	**String**	Read Only
Advanced.apcUpsConfigFieldOID_02	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:2	**String**	Read Only
Advanced.apcUpsConfigFieldOID_03	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:3	**String**	Read Only
Advanced.apcUpsConfigFieldOID_04	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:4	**String**	Read Only
Advanced.apcUpsConfigFieldOID_05	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:5	**String**	Read Only
Advanced.apcUpsConfigFieldOID_06	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:6	**String**	Read Only
Advanced.apcUpsConfigFieldOID_07	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:7	**String**	Read Only
Advanced.apcUpsConfigFieldOID_08	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:8	**String**	Read Only
Advanced.apcUpsConfigFieldOID_09	1.3.6.1.4.1.318.1.1.1.5.2.16.1.2:9	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_01	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:1	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_02	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:2	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_03	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:3	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_04	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:4	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_05	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:5	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_06	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:6	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_07	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:7	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_08	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:8	**String**	Read Only
Advanced.apcUpsConfigFieldValueRange_09	1.3.6.1.4.1.318.1.1.1.5.2.16.1.3:9	**String**	Read Only
Advanced.dipSwitchIndex_01	1.3.6.1.4.1.318.1.1.1.5.2.13.1.1:1	**Long**	Read Only
Advanced.dipSwitchStatus_01	1.3.6.1.4.1.318.1.1.1.5.2.13.1.2:1	**Long**	Read Only
Advanced.upsAdvConfigAlarm	1.3.6.1.4.1.318.1.1.1.5.2.4.0:0	**Long**	Read/Write
Advanced.upsAdvConfigAlarmLoadOver	1.3.6.1.4.1.318.1.1.1.5.2.22.0:0	**Long**	Read/Write

Tag Name	Object ID	Data Type	Access
Advanced.upsAdvConfigAlarmRedundancy	1.3.6.1.4.1.318.1.1.1.5.2.21.0:0	**Long**	Read/Write
Advanced.upsAdvConfigAlarmRuntimeUnder	1.3.6.1.4.1.318.1.1.1.5.2.23.0:0	**Long**	Read/Write
Advanced.upsAdvConfigAlarmTimer	1.3.6.1.4.1.318.1.1.1.5.2.5.0:0	**DWord**	Read/Write
Advanced.upsAdvConfigBattCabAmpHour	1.3.6.1.4.1.318.1.1.1.5.2.17.0:0	**Long**	Read/Write
Advanced.upsAdvConfigBattExhaustThresh	1.3.6.1.4.1.318.1.1.1.5.2.14.0:0	**DWord**	Read/Write
Advanced.upsAdvConfigHighTransferVolt	1.3.6.1.4.1.318.1.1.1.5.2.2.0:0	**Long**	Read/Write
Advanced.upsAdvConfigLowBatteryRunTime	1.3.6.1.4.1.318.1.1.1.5.2.8.0:0	**DWord**	Read/Write
Advanced.upsAdvConfigLowTransferVolt	1.3.6.1.4.1.318.1.1.1.5.2.3.0:0	**Long**	Read/Write
Advanced.upsAdvConfigMinReturnCapacity	1.3.6.1.4.1.318.1.1.1.5.2.6.0:0	**Long**	Read/Write
Advanced.upsAdvConfigOutputFreqRange	1.3.6.1.4.1.318.1.1.1.5.2.19.0:0	**Long**	Read/Write
Advanced.upsAdvConfigPassword	1.3.6.1.4.1.318.1.1.1.5.2.15.0:0	**String**	Read/Write
Advanced.upsAdvConfigPositionSelector	1.3.6.1.4.1.318.1.1.1.5.2.18.0:0	**Long**	Read/Write
Advanced.upsAdvConfigRatedOutputVoltage	1.3.6.1.4.1.318.1.1.1.5.2.1.0:0	**Long**	Read/Write
Advanced.upsAdvConfigReturnDelay	1.3.6.1.4.1.318.1.1.1.5.2.9.0:0	**DWord**	Read/Write
Advanced.upsAdvConfigSensitivity	1.3.6.1.4.1.318.1.1.1.5.2.7.0:0	**Long**	Read/Write
Advanced.upsAdvConfigSetEEPROMDefaults	1.3.6.1.4.1.318.1.1.1.5.2.12.0:0	**Long**	Read/Write
Advanced.upsAdvConfigShutoffDelay	1.3.6.1.4.1.318.1.1.1.5.2.10.0:0	**DWord**	Read/Write
Advanced.upsAdvConfigUPSFail	1.3.6.1.4.1.318.1.1.1.5.2.20.0:0	**Long**	Read/Write
Advanced.upsAdvConfigUpsSleepTime	1.3.6.1.4.1.318.1.1.1.5.2.11.0:0	**DWord**	Read/Write
Advanced.upsAdvConfigVoutReporting	1.3.6.1.4.1.318.1.1.1.5.2.24.0:0	**Long**	Read/Write

Group: UPSCNFGBASIC

Tag Name	Object ID	Data Type	Access
Basic.acceptThisDevice_01	1.3.6.1.4.1.318.1.1.1.5.1.2.1.4:1	**Long**	Read/Write
Basic.acceptThisDevice_02	1.3.6.1.4.1.318.1.1.1.5.1.2.1.4:2	**Long**	Read/Write
Basic.acceptThisDevice_03	1.3.6.1.4.1.318.1.1.1.5.1.2.1.4:3	**Long**	Read/Write
Basic.acceptThisDevice_04	1.3.6.1.4.1.318.1.1.1.5.1.2.1.4:4	**Long**	Read/Write
Basic.deviceIndex_01	1.3.6.1.4.1.318.1.1.1.5.1.2.1.1:1	**Long**	Read Only
Basic.deviceIndex_02	1.3.6.1.4.1.318.1.1.1.5.1.2.1.1:2	**Long**	Read Only
Basic.deviceIndex_03	1.3.6.1.4.1.318.1.1.1.5.1.2.1.1:3	**Long**	Read Only
Basic.deviceIndex_04	1.3.6.1.4.1.318.1.1.1.5.1.2.1.1:4	**Long**	Read Only
Basic.deviceName_01	1.3.6.1.4.1.318.1.1.1.5.1.2.1.2:1	**String**	Read/Write
Basic.deviceName_02	1.3.6.1.4.1.318.1.1.1.5.1.2.1.2:2	**String**	Read/Write
Basic.deviceName_03	1.3.6.1.4.1.318.1.1.1.5.1.2.1.2:3	**String**	Read/Write
Basic.deviceName_04	1.3.6.1.4.1.318.1.1.1.5.1.2.1.2:4	**String**	Read/Write
Basic.upsBasicConfigNumDevices	1.3.6.1.4.1.318.1.1.1.5.1.1.0:0	**Long**	Read Only
Basic.vaRating_01	1.3.6.1.4.1.318.1.1.1.5.1.2.1.3:1	**Long**	Read/Write
Basic.vaRating_02	1.3.6.1.4.1.318.1.1.1.5.1.2.1.3:2	**Long**	Read/Write

Tag Name	Object ID	Data Type	Access
Basic.vaRating_03	1.3.6.1.4.1.318.1.1.1.5.1.2.1.3:3	**Long**	Read/Write
Basic.vaRating_04	1.3.6.1.4.1.318.1.1.1.5.1.2.1.3:4	**Long**	Read/Write

Group: UPSCONTROL

Tag Name	Object ID	Data Type	Access
upsAdvControlBypassSwitch	1.3.6.1.4.1.318.1.1.1.6.2.7.0:0	**Long**	Read/Write
upsAdvControlFlashAndBeep	1.3.6.1.4.1.318.1.1.1.6.2.5.0:0	**Long**	Read/Write
upsAdvControlRebootUps	1.3.6.1.4.1.318.1.1.1.6.2.2.0:0	**Long**	Read/Write
upsAdvControlSimulatePowerFail	1.3.6.1.4.1.318.1.1.1.6.2.4.0:0	**Long**	Read/Write
upsAdvControlTurnOnUPS	1.3.6.1.4.1.318.1.1.1.6.2.6.0:0	**Long**	Read/Write
upsAdvControlUpsOff	1.3.6.1.4.1.318.1.1.1.6.2.1.0:0	**Long**	Read/Write
upsAdvControlUpsSleep	1.3.6.1.4.1.318.1.1.1.6.2.3.0:0	**Long**	Read/Write
upsBasicControlConserveBattery	1.3.6.1.4.1.318.1.1.1.6.1.1.0:0	**Long**	Read/Write

Group: UPSDCMIM2

Tag Name	Object ID	Data Type	Access
dcmim2IdentSysFWVersion	1.3.6.1.4.1.318.1.1.9.1.1.1.0:0	**Long**	Read Only

Group: UPSDCMIM2CNFG

Tag Name	Object ID	Data Type	Access
Config.dcmim2ConfigBattCapacityTestCurrent	1.3.6.1.4.1.318.1.1.9.3.2.9.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattCapacityTestEndThresh	1.3.6.1.4.1.318.1.1.9.3.2.8.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattCapacityTestPercent	1.3.6.1.4.1.318.1.1.9.3.2.7.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattFloatVolt	1.3.6.1.4.1.318.1.1.9.3.2.1.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattFunctTestDuration	1.3.6.1.4.1.318.1.1.9.3.2.5.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattFunctTestThresh	1.3.6.1.4.1.318.1.1.9.3.2.6.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattMaxRecharge	1.3.6.1.4.1.318.1.1.9.3.2.2.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattMfgCapacity	1.3.6.1.4.1.318.1.1.9.3.2.3.0:0	**Long**	Read/Write
Config.dcmim2ConfigBattType	1.3.6.1.4.1.318.1.1.9.3.2.4.0:0	**Long**	Read/Write
Config.dcmim2ConfigLVDTableSize	1.3.6.1.4.1.318.1.1.9.3.3.1.0:0	**Long**	Read Only
Config.dcmim2ConfigSysHighTempReset	1.3.6.1.4.1.318.1.1.9.3.1.2.0:0	**Long**	Read/Write
Config.dcmim2ConfigSysHighTempTrip	1.3.6.1.4.1.318.1.1.9.3.1.1.0:0	**Long**	Read/Write
Config.dcmim2ConfigSysLowTempReset	1.3.6.1.4.1.318.1.1.9.3.1.4.0:0	**Long**	Read/Write
Config.dcmim2ConfigSysLowTempTrip	1.3.6.1.4.1.318.1.1.9.3.1.3.0:0	**Long**	Read/Write

Group: UPSDCMIM2CTRL

Tag Name	Object ID	Data Type	Access
Control.dcmim2ControlRunCapacityBatteryTest	1.3.6.1.4.1.318.1.1.9.2.1.2.0:0	**Long**	Read/Write

Tag Name	Object ID	Data Type	Access
Control.dcmim2ControlRunFunctBatteryTest	1.3.6.1.4.1.318.1.1.9.2.1.1.0:0	**Long**	Read/Write

Group: UPSDCMIM2STATUS

Tag Name	Object ID	Data Type	Access
Status.dcmim2StatusAlarmsTableSize	1.3.6.1.4.1.318.1.1.9.4.5.1.0:0	**Long**	Read Only
Status.dcmim2StatusBattCapacityTestResult	1.3.6.1.4.1.318.1.1.9.4.3.7.0:0	**Long**	Read Only
Status.dcmim2StatusBattCurrent	1.3.6.1.4.1.318.1.1.9.4.3.2.0:0	**Long**	Read Only
Status.dcmim2StatusBattFloatVolt	1.3.6.1.4.1.318.1.1.9.4.3.1.0:0	**Long**	Read Only
Status.dcmim2StatusBattFunctTestResult	1.3.6.1.4.1.318.1.1.9.4.3.6.0:0	**Long**	Read Only
Status.dcmim2StatusBattMfgCapacity	1.3.6.1.4.1.318.1.1.9.4.3.4.0:0	**Long**	Read Only
Status.dcmim2StatusBattTemp	1.3.6.1.4.1.318.1.1.9.4.3.3.0:0	**Long**	Read Only
Status.dcmim2StatusBattTestCapacity	1.3.6.1.4.1.318.1.1.9.4.3.5.0:0	**Long**	Read Only
Status.dcmim2StatusLVDTableSize	1.3.6.1.4.1.318.1.1.9.4.4.1.0:0	**Long**	Read Only
Status.dcmim2StatusRectTableSize	1.3.6.1.4.1.318.1.1.9.4.2.1.0:0	**Long**	Read Only
Status.dcmim2StatusSysAmbientTemp	1.3.6.1.4.1.318.1.1.9.4.1.4.0:0	**Long**	Read Only
Status.dcmim2StatusSysBusVoltage	1.3.6.1.4.1.318.1.1.9.4.1.3.0:0	**Long**	Read Only
Status.dcmim2StatusSysLoadCurrent	1.3.6.1.4.1.318.1.1.9.4.1.2.0:0	**Long**	Read Only
Status.dcmim2StatusSysRectCurrent	1.3.6.1.4.1.318.1.1.9.4.1.1.0:0	**Long**	Read Only
Status.dcmim2StatusSysTempUnits	1.3.6.1.4.1.318.1.1.9.4.1.6.0:0	**Long**	Read Only
Status.dcmim2StatusSysUpTime	1.3.6.1.4.1.318.1.1.9.4.1.5.0:0	**String**	Read Only

Group: UPSDIAG

Tag Name	Object ID	Data Type	Access
upsDiagBatteryTableSize	1.3.6.1.4.1.318.1.1.1.13.3.1.0:0	**Long**	Read Only
upsDiagIMTableSize	1.3.6.1.4.1.318.1.1.1.13.1.1.0:0	**Long**	Read Only
upsDiagPMTableSize	1.3.6.1.4.1.318.1.1.1.13.2.1.0:0	**Long**	Read Only

Groups: UPSDIAGCOMM

Tag Name	Object ID	Data Type	Access
upsDiagComBusExternalMIMStatus	1.3.6.1.4.1.318.1.1.1.13.6.4.0:0	**Long**	Read Only
upsDiagComBusExternalRIMStatus	1.3.6.1.4.1.318.1.1.1.13.6.5.0:0	**Long**	Read Only
upsDiagComBusInternalMIMStatus	1.3.6.1.4.1.318.1.1.1.13.6.1.0:0	**Long**	Read Only
upsDiagComBusInternalRIMStatus	1.3.6.1.4.1.318.1.1.1.13.6.2.0:0	**Long**	Read Only
upsDiagComBusMIMtoRIMStatus	1.3.6.1.4.1.318.1.1.1.13.6.3.0:0	**Long**	Read Only

Groups: UPSDIAGEXT

Tag Name	Object ID	Data Type	Access
upsDiagMCCBBoxStatus	1.3.6.1.4.1.318.1.1.1.13.5.2.1.0:0	**Long**	Read Only
upsDiagSwitchGearBypassSwitchStatus	1.3.6.1.4.1.318.1.1.1.13.5.1.4.0:0	**Long**	Read Only
upsDiagSwitchGearInputSwitchStatus	1.3.6.1.4.1.318.1.1.1.13.5.1.2.0:0	**Long**	Read Only
upsDiagSwitchGearOutputSwitchStatus	1.3.6.1.4.1.318.1.1.1.13.5.1.3.0:0	**Long**	Read Only
upsDiagSwitchGearStatus	1.3.6.1.4.1.318.1.1.1.13.5.1.1.0:0	**Long**	Read Only
upsDiagTransformerStatus	1.3.6.1.4.1.318.1.1.1.13.5.3.1.0:0	**Long**	Read Only

Groups: UPSDIAGSUB

Tag Name	Object ID	Data Type	Access
upsDiagSubSysBattMonitorTableSize	1.3.6.1.4.1.318.1.1.1.13.4.5.0:0	**Long**	Read Only
upsDiagSubSysChargerTableSize	1.3.6.1.4.1.318.1.1.1.13.4.19.0:0	**Long**	Read Only
upsDiagSubSysDCCircuitBreakerTableSize	1.3.6.1.4.1.318.1.1.1.13.4.11.0:0	**Long**	Read Only
upsDiagSubSysDisplayInterfaceCardTableSize	1.3.6.1.4.1.318.1.1.1.13.4.9.0:0	**Long**	Read Only
upsDiagSubSysExternalPowerFrameBoardTableSize	1.3.6.1.4.1.318.1.1.1.13.4.17.0:0	**Long**	Read Only
upsDiagSubSysExternalSwitchGearTableSize	1.3.6.1.4.1.318.1.1.1.13.4.7.0:0	**Long**	Read Only
upsDiagSubSysFrameTableSize	1.3.6.1.4.1.318.1.1.1.13.4.1.0:0	**Long**	Read Only
upsDiagSubSysIntBypSwitchTableSize	1.3.6.1.4.1.318.1.1.1.13.4.3.0:0	**Long**	Read Only
upsDiagSubSysSystemPowerSupplyTableSize	1.3.6.1.4.1.318.1.1.1.13.4.13.0:0	**Long**	Read Only
upsDiagSubSysXRCommunicationCardTableSize	1.3.6.1.4.1.318.1.1.1.13.4.15.0:0	**Long**	Read Only

Groups: UPSDM3CNFG

Tag Name	Object ID	Data Type	Access
Config.dm3ConfigBattAmpHour	1.3.6.1.4.1.318.1.1.7.2.3.13.0:0	**Long**	Read/Write
Config.dm3ConfigBattDischargeAlarm	1.3.6.1.4.1.318.1.1.7.2.3.4.0:0	**Long**	Read/Write
Config.dm3ConfigBattDischargeThresh	1.3.6.1.4.1.318.1.1.7.2.3.3.0:0	**Long**	Read/Write
Config.dm3ConfigBattFloatVolt	1.3.6.1.4.1.318.1.1.7.2.3.1.0:0	**Long**	Read/Write
Config.dm3ConfigBattHighTempAlarm	1.3.6.1.4.1.318.1.1.7.2.3.10.0:0	**Long**	Read/Write
Config.dm3ConfigBattHighTempThresh	1.3.6.1.4.1.318.1.1.7.2.3.9.0:0	**Long**	Read/Write

Tag Name	Object ID	Data Type	Access
Config.dm3ConfigBattHighVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.3.6.0:0	**Long**	Read/Write
Config.dm3ConfigBattHighVoltThresh	1.3.6.1.4.1.318.1.1.7.2.3.5.0:0	**Long**	Read/Write
Config.dm3ConfigBattHwCurrentAlarm	1.3.6.1.4.1.318.1.1.7.2.3.18.0:0	**Long**	Read/Write
Config.dm3ConfigBattHwTempAlarm	1.3.6.1.4.1.318.1.1.7.2.3.19.0:0	**Long**	Read/Write
Config.dm3ConfigBattLowTempAlarm	1.3.6.1.4.1.318.1.1.7.2.3.12.0:0	**Long**	Read/Write
Config.dm3ConfigBattLowTempThresh	1.3.6.1.4.1.318.1.1.7.2.3.11.0:0	**Long**	Read/Write
Config.dm3ConfigBattLowVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.3.8.0:0	**Long**	Read/Write
Config.dm3ConfigBattLowVoltThresh	1.3.6.1.4.1.318.1.1.7.2.3.7.0:0	**Long**	Read/Write
Config.dm3ConfigBattMaxRecharge	1.3.6.1.4.1.318.1.1.7.2.3.2.0:0	**Long**	Read/Write
Config.dm3ConfigBreakersTableSize	1.3.6.1.4.1.318.1.1.7.2.6.1.1.0:0	**Long**	Read Only
Config.dm3ConfigCompMethod	1.3.6.1.4.1.318.1.1.7.2.3.14.0:0	**Long**	Read/Write
Config.dm3ConfigCompTempCoeff	1.3.6.1.4.1.318.1.1.7.2.3.15.0:0	**Long**	Read/Write
Config.dm3ConfigConv1ofNAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.4.0:0	**Long**	Read/Write
Config.dm3ConfigConv2ofNAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.5.0:0	**Long**	Read/Write
Config.dm3ConfigConvConfigAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.3.0:0	**Long**	Read/Write
Config.dm3ConfigConvCurrLimitAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.8.0:0	**Long**	Read/Write
Config.dm3ConfigConvDiagAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.6.0:0	**Long**	Read/Write
Config.dm3ConfigConvFailAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.11.0:0	**Long**	Read/Write
Config.dm3ConfigConvFailComm	1.3.6.1.4.1.318.1.1.7.2.4.2.1.7.0:0	**Long**	Read/Write
Config.dm3ConfigConvFailMax	1.3.6.1.4.1.318.1.1.7.2.4.2.1.5.0:0	**Long**	Read/Write
Config.dm3ConfigConvFailMin	1.3.6.1.4.1.318.1.1.7.2.4.2.1.6.0:0	**Long**	Read/Write
Config.dm3ConfigConvFailSafe	1.3.6.1.4.1.318.1.1.7.2.4.2.1.3.0:0	**Long**	Read/Write
Config.dm3ConfigConvFanFailAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.10.0:0	**Long**	Read/Write
Config.dm3ConfigConvHighVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.1.0:0	**Long**	Read/Write
Config.dm3ConfigConvHighVoltThresh	1.3.6.1.4.1.318.1.1.7.2.4.2.1.1.0:0	**Long**	Read/Write
Config.dm3ConfigConvHwVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.12.0:0	**Long**	Read/Write
Config.dm3ConfigConvImbalanceAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.7.0:0	**Long**	Read/Write
Config.dm3ConfigConvLowVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.2.0:0	**Long**	Read/Write
Config.dm3ConfigConvLowVoltThresh	1.3.6.1.4.1.318.1.1.7.2.4.2.1.2.0:0	**Long**	Read/Write
Config.dm3ConfigConvSetPoint	1.3.6.1.4.1.318.1.1.7.2.4.2.1.4.0:0	**Long**	Read/Write
Config.dm3ConfigConvStandbyAlarm	1.3.6.1.4.1.318.1.1.7.2.4.2.2.9.0:0	**Long**	Read/Write
Config.dm3ConfigFusesTableSize	1.3.6.1.4.1.318.1.1.7.2.6.2.1.0:0	**Long**	Read Only
Config.dm3ConfigHighKneeTemp	1.3.6.1.4.1.318.1.1.7.2.3.16.0:0	**Long**	Read/Write
Config.dm3ConfigInRlyTableSize	1.3.6.1.4.1.318.1.1.7.2.5.2.1.0:0	**Long**	Read Only
Config.dm3ConfigLowKneeTemp	1.3.6.1.4.1.318.1.1.7.2.3.17.0:0	**Long**	Read/Write
Config.dm3ConfigLVDTableSize	1.3.6.1.4.1.318.1.1.7.2.2.1.0:0	**Long**	Read Only
Config.dm3ConfigOutRlyTableSize	1.3.6.1.4.1.318.1.1.7.2.5.1.1.0:0	**Long**	Read Only
Config.dm3ConfigRect1ofNAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.4.0:0	**Long**	Read/Write

Tag Name	Object ID	Data Type	Access
Config.dm3ConfigRect2ofNAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.5.0:0	**Long**	Read/Write
Config.dm3ConfigRectConfigAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.3.0:0	**Long**	Read/Write
Config.dm3ConfigRectCurrLimitAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.8.0:0	**Long**	Read/Write
Config.dm3ConfigRectDiagAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.6.0:0	**Long**	Read/Write
Config.dm3ConfigRectFailAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.11.0:0	**Long**	Read/Write
Config.dm3ConfigRectFailComm	1.3.6.1.4.1.318.1.1.7.2.4.1.1.4.0:0	**Long**	Read/Write
Config.dm3ConfigRectFailSafe	1.3.6.1.4.1.318.1.1.7.2.4.1.1.3.0:0	**Long**	Read/Write
Config.dm3ConfigRectFanFailAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.10.0:0	**Long**	Read/Write
Config.dm3ConfigRectHighVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.1.0:0	**Long**	Read/Write
Config.dm3ConfigRectHighVoltThresh	1.3.6.1.4.1.318.1.1.7.2.4.1.1.1.0:0	**Long**	Read/Write
Config.dm3ConfigRectHwVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.12.0:0	**Long**	Read/Write
Config.dm3ConfigRectImbalanceAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.7.0:0	**Long**	Read/Write
Config.dm3ConfigRectLowVoltAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.2.0:0	**Long**	Read/Write
Config.dm3ConfigRectLowVoltThresh	1.3.6.1.4.1.318.1.1.7.2.4.1.1.2.0:0	**Long**	Read/Write
Config.dm3ConfigRectStandbyAlarm	1.3.6.1.4.1.318.1.1.7.2.4.1.2.9.0:0	**Long**	Read/Write
Config.dm3ConfigSysDescriptionTableSize	1.3.6.1.4.1.318.1.1.7.2.1.1.0:0	**Long**	Read Only
Config.dm3ConfigSysHardwareTempAlarm	1.3.6.1.4.1.318.1.1.7.2.1.7.0:0	**Long**	Read/Write
Config.dm3ConfigSysHighTempAlarm	1.3.6.1.4.1.318.1.1.7.2.1.4.0:0	**Long**	Read/Write
Config.dm3ConfigSysHighTempThresh	1.3.6.1.4.1.318.1.1.7.2.1.3.0:0	**Long**	Read/Write
Config.dm3ConfigSysLowTempAlarm	1.3.6.1.4.1.318.1.1.7.2.1.6.0:0	**Long**	Read/Write
Config.dm3ConfigSysLowTempThresh	1.3.6.1.4.1.318.1.1.7.2.1.5.0:0	**Long**	Read/Write
Config.dm3ConfigSysRemoteAccess	1.3.6.1.4.1.318.1.1.7.2.1.8.0:0	**Long**	Read/Write

Group: UPSDM3IDENT

Tag Name	Object ID	Data Type	Access
dm3IdentSysCntrlRev	1.3.6.1.4.1.318.1.1.7.1.1.4.0:0	**Long**	Read Only
dm3IdentSysDescriptionTableSize	1.3.6.1.4.1.318.1.1.7.1.1.1.0:0	**Long**	Read Only
dm3IdentSysFWVersion	1.3.6.1.4.1.318.1.1.7.1.1.5.0:0	**Long**	Read Only
dm3IdentSysModel	1.3.6.1.4.1.318.1.1.7.1.1.3.0:0	**Long**	Read Only

Group: UPSDM3STATUS

Tag Name	Object ID	Data Type	Access
Status.dm3StatusAlarmsTableSize	1.3.6.1.4.1.318.1.1.7.3.2.1.0:0	**Long**	Read Only
Status.dm3StatusBattCurrent	1.3.6.1.4.1.318.1.1.7.3.3.1.0:0	**Long**	Read Only
Status.dm3StatusBattCurrentSanity	1.3.6.1.4.1.318.1.1.7.3.3.3.0:0	**Long**	Read Only
Status.dm3StatusBattTemp	1.3.6.1.4.1.318.1.1.7.3.3.2.0:0	**Long**	Read Only
Status.dm3StatusBattTempSanity	1.3.6.1.4.1.318.1.1.7.3.3.4.0:0	**Long**	Read Only
Status.dm3StatusBreakersTableSize	1.3.6.1.4.1.318.1.1.7.3.8.1.1.0:0	**Long**	Read Only

Tag Name	Object ID	Data Type	Access
Status.dm3StatusConvTableSize	1.3.6.1.4.1.318.1.1.7.3.6.2.1.0:0	**Long**	Read Only
Status.dm3StatusFusesTableSize	1.3.6.1.4.1.318.1.1.7.3.8.2.1.0:0	**Long**	Read Only
Status.dm3StatusInRlyTableSize	1.3.6.1.4.1.318.1.1.7.3.7.2.1.0:0	**Long**	Read Only
Status.dm3StatusLVDTableSize	1.3.6.1.4.1.318.1.1.7.3.5.1.0:0	**Long**	Read Only
Status.dm3StatusOEMconvGain	1.3.6.1.4.1.318.1.1.7.3.4.4.0:0	**Long**	Read Only
Status.dm3StatusOEMconvOffset	1.3.6.1.4.1.318.1.1.7.3.4.3.0:0	**Long**	Read Only
Status.dm3StatusOEMrectGain	1.3.6.1.4.1.318.1.1.7.3.4.2.0:0	**Long**	Read Only
Status.dm3StatusOEMrectOffset	1.3.6.1.4.1.318.1.1.7.3.4.1.0:0	**Long**	Read Only
Status.dm3StatusOEMshuntGain	1.3.6.1.4.1.318.1.1.7.3.4.6.0:0	**Long**	Read Only
Status.dm3StatusOEMshuntOffset	1.3.6.1.4.1.318.1.1.7.3.4.5.0:0	**Long**	Read Only
Status.dm3StatusOutRlyTableSize	1.3.6.1.4.1.318.1.1.7.3.7.1.1.0:0	**Long**	Read Only
Status.dm3StatusRectTableSize	1.3.6.1.4.1.318.1.1.7.3.6.1.1.0:0	**Long**	Read Only
Status.dm3StatusSysAlarmState	1.3.6.1.4.1.318.1.1.7.3.1.6.0:0	**Long**	Read Only
Status.dm3StatusSysConvAvailable	1.3.6.1.4.1.318.1.1.7.3.6.2.4.0:0	**Long**	Read Only
Status.dm3StatusSysConvCurrent	1.3.6.1.4.1.318.1.1.7.3.6.2.7.0:0	**Long**	Read Only
Status.dm3StatusSysConvType	1.3.6.1.4.1.318.1.1.7.3.6.2.5.0:0	**Long**	Read Only
Status.dm3StatusSysConvVoltage	1.3.6.1.4.1.318.1.1.7.3.6.2.6.0:0	**Long**	Read Only
Status.dm3StatusSysConvVoltSanity	1.3.6.1.4.1.318.1.1.7.3.6.2.3.0:0	**Long**	Read Only
Status.dm3StatusSysRectAvailable	1.3.6.1.4.1.318.1.1.7.3.6.1.4.0:0	**Long**	Read Only
Status.dm3StatusSysRectCurrent	1.3.6.1.4.1.318.1.1.7.3.6.1.7.0:0	**Long**	Read Only
Status.dm3StatusSysRectType	1.3.6.1.4.1.318.1.1.7.3.6.1.5.0:0	**Long**	Read Only
Status.dm3StatusSysRectVoltage	1.3.6.1.4.1.318.1.1.7.3.6.1.6.0:0	**Long**	Read Only
Status.dm3StatusSysRectVoltSanity	1.3.6.1.4.1.318.1.1.7.3.6.1.3.0:0	**Long**	Read Only
Status.dm3StatusSysRemoteAccess	1.3.6.1.4.1.318.1.1.7.3.1.3.0:0	**Long**	Read Only
Status.dm3StatusSysSecurityLevel	1.3.6.1.4.1.318.1.1.7.3.1.4.0:0	**Long**	Read Only
Status.dm3StatusSysTempSanity	1.3.6.1.4.1.318.1.1.7.3.1.5.0:0	**Long**	Read Only
Status.dm3StatusSysTempUnits	1.3.6.1.4.1.318.1.1.7.3.1.7.0:0	**Long**	Read Only
Status.dm3StatusSystemStart	1.3.6.1.4.1.318.1.1.7.3.1.2.0:0	**String**	Read Only
Status.dm3StatusSystemTemp	1.3.6.1.4.1.318.1.1.7.3.1.1.0:0	**Long**	Read Only

Group: UPSEMS

Tag Name	Object ID	Data Type	Access
emsConfigCheckLogLight	1.3.6.1.4.1.318.1.1.10.3.6.2.0:0	**Long**	Read/Write
emsConfigName	1.3.6.1.4.1.318.1.1.10.3.6.1.0:0	**String**	Read/Write
emsIdentDATEOfManufacture	1.3.6.1.4.1.318.1.1.10.3.1.5.0:0	**String**	Read Only
emsIdentEMSName	1.3.6.1.4.1.318.1.1.10.3.1.1.0:0	**String**	Read Only
emsIdentFirmwareRev	1.3.6.1.4.1.318.1.1.10.3.1.3.0:0	**String**	Read Only
emsIdentHardwareRev	1.3.6.1.4.1.318.1.1.10.3.1.4.0:0	**String**	Read Only
emsIdentProductNumber	1.3.6.1.4.1.318.1.1.10.3.1.2.0:0	**String**	Read Only

Tag Name	Object ID	Data Type	Access
emsIdentSerialNumber	1.3.6.1.4.1.318.1.1.10.3.1.6.0:0	**String**	Read Only
emsStatusAlarmDeviceCount	1.3.6.1.4.1.318.1.1.10.3.12.10.0:0	**Long**	Read Only
emsStatusAlinkAruDeviceCount	1.3.6.1.4.1.318.1.1.10.3.12.8.0:0	**Long**	Read Only
emsStatusAlinkProbeDeviceCount	1.3.6.1.4.1.318.1.1.10.3.12.9.0:0	**Long**	Read Only
emsStatusCheckLogLight	1.3.6.1.4.1.318.1.1.10.3.12.12.0:0	**Long**	Read Only
emsStatusCommStatus	1.3.6.1.4.1.318.1.1.10.3.12.2.0:0	**Long**	Read Only
emsStatusEMSName	1.3.6.1.4.1.318.1.1.10.3.12.1.0:0	**String**	Read Only
emsStatusInputContactCount	1.3.6.1.4.1.318.1.1.10.3.12.4.0:0	**Long**	Read Only
emsStatusOutletCount	1.3.6.1.4.1.318.1.1.10.3.12.6.0:0	**Long**	Read Only
emsStatusOutputRelayCount	1.3.6.1.4.1.318.1.1.10.3.12.5.0:0	**Long**	Read Only
emsStatusProbeCount	1.3.6.1.4.1.318.1.1.10.3.12.3.0:0	**Long**	Read Only
emsStatusSensorCount	1.3.6.1.4.1.318.1.1.10.3.12.7.0:0	**Long**	Read Only
emsStatusSysTempUnits	1.3.6.1.4.1.318.1.1.10.3.12.11.0:0	**Long**	Read Only

Group: UPSENV

Tag Name	Object ID	Data Type	Access
mUpsContactNumContacts	1.3.6.1.4.1.318.1.1.2.2.1.0:0	**Long**	Read Only
mUpsEnvironAmbientTemperature	1.3.6.1.4.1.318.1.1.2.1.1.0:0	**DWord**	Read Only
mUpsEnvironAmbientTemperature2	1.3.6.1.4.1.318.1.1.2.1.3.0:0	**DWord**	Read Only
mUpsEnvironRelativeHumidity	1.3.6.1.4.1.318.1.1.2.1.2.0:0	**DWord**	Read Only
mUpsEnvironRelativeHumidity2	1.3.6.1.4.1.318.1.1.2.1.4.0:0	**DWord**	Read Only

Group: UPSEXTENV

Tag Name	Object ID	Data Type	Access
emIdentFirmwareRevision	1.3.6.1.4.1.318.1.1.10.1.1.1.0:0	**String**	Read Only

Group: UPSEXTENVCNFG

Tag Name	Object ID	Data Type	Access
Config.emConfigContactEnable_01	1.3.6.1.4.1.318.1.1.10.1.2.4.1.3:1	**Long**	Read/Write
Config.emConfigContactEnable_02	1.3.6.1.4.1.318.1.1.10.1.2.4.1.3:2	**Long**	Read/Write
Config.emConfigContactEnable_03	1.3.6.1.4.1.318.1.1.10.1.2.4.1.3:3	**Long**	Read/Write
Config.emConfigContactEnable_04	1.3.6.1.4.1.318.1.1.10.1.2.4.1.3:4	**Long**	Read/Write
Config.emConfigContactName_01	1.3.6.1.4.1.318.1.1.10.1.2.4.1.2:1	**String**	Read/Write
Config.emConfigContactName_02	1.3.6.1.4.1.318.1.1.10.1.2.4.1.2:2	**String**	Read/Write
Config.emConfigContactName_03	1.3.6.1.4.1.318.1.1.10.1.2.4.1.2:3	**String**	Read/Write
Config.emConfigContactName_04	1.3.6.1.4.1.318.1.1.10.1.2.4.1.2:4	**String**	Read/Write
Config.emConfigContactNumber_01	1.3.6.1.4.1.318.1.1.10.1.2.4.1.1:1	**Long**	Read Only
Config.emConfigContactNumber_02	1.3.6.1.4.1.318.1.1.10.1.2.4.1.1:2	**Long**	Read Only

Tag Name	Object ID	Data Type	Access
Config.emConfigContactNumber_03	1.3.6.1.4.1.318.1.1.10.1.2.4.1.1:3	**Long**	Read Only
Config.emConfigContactNumber_04	1.3.6.1.4.1.318.1.1.10.1.2.4.1.1:4	**Long**	Read Only
Config.emConfigContactsNumContacts	1.3.6.1.4.1.318.1.1.10.1.2.3.0:0	**Long**	Read Only
Config.emConfigProbeHighHumidEnable_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.10:1	**Long**	Read/Write
Config.emConfigProbeHighHumidEnable_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.10:2	**Long**	Read/Write
Config.emConfigProbeHighHumidThreshold_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.6:1	**Long**	Read/Write
Config.emConfigProbeHighHumidThreshold_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.6:2	**Long**	Read/Write
Config.emConfigProbeHighTempEnable_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.8:1	**Long**	Read/Write
Config.emConfigProbeHighTempEnable_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.8:2	**Long**	Read/Write
Config.emConfigProbeHighTempThreshold_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.3:1	**Long**	Read/Write
Config.emConfigProbeHighTempThreshold_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.3:2	**Long**	Read/Write
Config.emConfigProbeLowHumidEnable_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.11:1	**Long**	Read/Write
Config.emConfigProbeLowHumidEnable_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.11:2	**Long**	Read/Write
Config.emConfigProbeLowHumidThreshold_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.7:1	**Long**	Read/Write
Config.emConfigProbeLowHumidThreshold_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.7:2	**Long**	Read/Write
Config.emConfigProbeLowTempEnable_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.9:1	**Long**	Read/Write
Config.emConfigProbeLowTempEnable_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.9:2	**Long**	Read/Write
Config.emConfigProbeLowTempThreshold_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.4:1	**Long**	Read/Write
Config.emConfigProbeLowTempThreshold_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.4:2	**Long**	Read/Write
Config.emConfigProbeName_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.2:1	**String**	Read/Write
Config.emConfigProbeName_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.2:2	**String**	Read/Write
Config.emConfigProbeNumber_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.1:1	**Long**	Read Only
Config.emConfigProbeNumber_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.1:2	**Long**	Read Only
Config.emConfigProbesNumProbes	1.3.6.1.4.1.318.1.1.10.1.2.1.0:0	**Long**	Read Only
Config.emConfigProbeTempUnits_01	1.3.6.1.4.1.318.1.1.10.1.2.2.1.5:1	**Long**	Read Only
Config.emConfigProbeTempUnits_02	1.3.6.1.4.1.318.1.1.10.1.2.2.1.5:2	**Long**	Read Only

Group: UPSEXTENVSTAT

Tag Name	Object ID	Data Type	Access
Status.emStatusCommStatus	1.3.6.1.4.1.318.1.1.10.1.3.1.0:0	**Long**	Read Only
Status.emStatusContactName_01	1.3.6.1.4.1.318.1.1.10.1.3.5.1.2:1	**String**	Read Only

Tag Name	Object ID	Data Type	Access
Status.emStatusContactName_02	1.3.6.1.4.1.318.1.1.10.1.3.5.1.2:2	**String**	Read Only
Status.emStatusContactName_03	1.3.6.1.4.1.318.1.1.10.1.3.5.1.2:3	**String**	Read Only
Status.emStatusContactName_04	1.3.6.1.4.1.318.1.1.10.1.3.5.1.2:4	**String**	Read Only
Status.emStatusContactNumber_01	1.3.6.1.4.1.318.1.1.10.1.3.5.1.1:1	**Long**	Read Only
Status.emStatusContactNumber_02	1.3.6.1.4.1.318.1.1.10.1.3.5.1.1:2	**Long**	Read Only
Status.emStatusContactNumber_03	1.3.6.1.4.1.318.1.1.10.1.3.5.1.1:3	**Long**	Read Only
Status.emStatusContactNumber_04	1.3.6.1.4.1.318.1.1.10.1.3.5.1.1:4	**Long**	Read Only
Status.emStatusContactsNumContacts	1.3.6.1.4.1.318.1.1.10.1.3.4.0:0	**Long**	Read Only
Status.emStatusContactStatus_01	1.3.6.1.4.1.318.1.1.10.1.3.5.1.3:1	**Long**	Read Only
Status.emStatusContactStatus_02	1.3.6.1.4.1.318.1.1.10.1.3.5.1.3:2	**Long**	Read Only
Status.emStatusContactStatus_03	1.3.6.1.4.1.318.1.1.10.1.3.5.1.3:3	**Long**	Read Only
Status.emStatusContactStatus_04	1.3.6.1.4.1.318.1.1.10.1.3.5.1.3:4	**Long**	Read Only
Status.emStatusProbeCurrentHumid_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.6:1	**Long**	Read Only
Status.emStatusProbeCurrentHumid_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.6:2	**Long**	Read Only
Status.emStatusProbeCurrentTemp_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.4:1	**Long**	Read Only
Status.emStatusProbeCurrentTemp_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.4:2	**Long**	Read Only
Status.emStatusProbeHighHumidViolation_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.9:1	**Long**	Read Only
Status.emStatusProbeHighHumidViolation_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.9:2	**Long**	Read Only
Status.emStatusProbeHighTempViolation_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.7:1	**Long**	Read Only
Status.emStatusProbeHighTempViolation_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.7:2	**Long**	Read Only
Status.emStatusProbeLowHumidViolation_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.10:1	**Long**	Read Only
Status.emStatusProbeLowHumidViolation_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.10:2	**Long**	Read Only
Status.emStatusProbeLowTempViolation_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.8:1	**Long**	Read Only
Status.emStatusProbeLowTempViolation_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.8:2	**Long**	Read Only
Status.emStatusProbeName_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.2:1	**String**	Read Only
Status.emStatusProbeName_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.2:2	**String**	Read Only
Status.emStatusProbeNumber_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.1:1	**Long**	Read Only
Status.emStatusProbeNumber_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.1:2	**Long**	Read Only
Status.emStatusProbesNumProbes	1.3.6.1.4.1.318.1.1.10.1.3.2.0:0	**Long**	Read Only
Status.emStatusProbeStatus_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.3:1	**Long**	Read Only
Status.emStatusProbeStatus_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.3:2	**Long**	Read Only
Status.emStatusProbeTempUnits_01	1.3.6.1.4.1.318.1.1.10.1.3.3.1.5:1	**Long**	Read Only

Tag Name	Object ID	Data Type	Access
Status.emStatusProbeTempUnits_02	1.3.6.1.4.1.318.1.1.10.1.3.3.1.5:2	**Long**	Read Only

Group: UPSIDENT

Tag Name	Object ID	Data Type	Access
upsAdvIdentDATEOfManufacture	1.3.6.1.4.1.318.1.1.1.1.2.2.0:0	**String**	Read Only
upsAdvIdentFirmwareRevision	1.3.6.1.4.1.318.1.1.1.1.2.1.0:0	**String**	Read Only
upsAdvIdentSerialNumber	1.3.6.1.4.1.318.1.1.1.1.2.3.0:0	**String**	Read Only
upsBasicIdentModel	1.3.6.1.4.1.318.1.1.1.1.1.1.0:0	**String**	Read Only
upsBasicIdentName	1.3.6.1.4.1.318.1.1.1.1.1.2.0:0	**String**	Read/Write

Group: UPSINPUT

Tag Name	Object ID	Data Type	Access
upsAdvInputFrequency	1.3.6.1.4.1.318.1.1.1.3.2.4.0:0	**DWord**	Read Only
upsAdvInputLineFailCause	1.3.6.1.4.1.318.1.1.1.3.2.5.0:0	**Long**	Read Only
upsAdvInputLineVoltage	1.3.6.1.4.1.318.1.1.1.3.2.1.0:0	**DWord**	Read Only
upsAdvInputMaxLineVoltage	1.3.6.1.4.1.318.1.1.1.3.2.2.0:0	**DWord**	Read Only
upsAdvInputMinLineVoltage	1.3.6.1.4.1.318.1.1.1.3.2.3.0:0	**DWord**	Read Only
upsBasicInputPhase	1.3.6.1.4.1.318.1.1.1.3.1.1.0:0	**Long**	Read Only

Group: UPSINTENV

Tag Name	Object ID	Data Type	Access
iemIdentHardwareRevision	1.3.6.1.4.1.318.1.1.10.2.1.1.0:0	**String**	Read Only

Group: UPSINTENVCNFG

Tag Name	Object ID	Data Type	Access
Config.iemConfigContactEnable_01	1.3.6.1.4.1.318.1.1.10.2.2.4.1.3:1	**Long**	Read/Write
Config.iemConfigContactEnable_02	1.3.6.1.4.1.318.1.1.10.2.2.4.1.3:2	**Long**	Read/Write
Config.iemConfigContactName_01	1.3.6.1.4.1.318.1.1.10.2.2.4.1.2:1	**String**	Read/Write
Config.iemConfigContactName_02	1.3.6.1.4.1.318.1.1.10.2.2.4.1.2:2	**String**	Read/Write
Config.iemConfigContactNumber_01	1.3.6.1.4.1.318.1.1.10.2.2.4.1.1:1	**Long**	Read Only
Config.iemConfigContactNumber_02	1.3.6.1.4.1.318.1.1.10.2.2.4.1.1:2	**Long**	Read Only
Config.iemConfigContactsNumContacts	1.3.6.1.4.1.318.1.1.10.2.2.3.0:0	**Long**	Read Only
Config.iemConfigProbeHighHumidEnable_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.10:1	**Long**	Read/Write
Config.iemConfigProbeHighHumidThreshold_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.6:1	**Long**	Read/Write
Config.iemConfigProbeHighTempEnable_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.8:1	**Long**	Read/Write
Config.iemConfigProbeHighTempThreshold_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.3:1	**Long**	Read/Write

Tag Name	Object ID	Data Type	Access
Config.iemConfigProbeLowHumidEnable_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.11:1	**Long**	Read/Write
Config.iemConfigProbeLowHumidThreshold_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.7:1	**Long**	Read/Write
Config.iemConfigProbeLowTempEnable_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.9:1	**Long**	Read/Write
Config.iemConfigProbeLowTempThreshold_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.4:1	**Long**	Read/Write
Config.iemConfigProbeName_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.2:1	**String**	Read/Write
Config.iemConfigProbeNumber_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.1:1	**Long**	Read Only
Config.iemConfigProbesNumProbes	1.3.6.1.4.1.318.1.1.10.2.2.1.0:0	**Long**	Read Only
Config.iemConfigProbeTempUnits_01	1.3.6.1.4.1.318.1.1.10.2.2.2.1.5:1	**Long**	Read Only

Group: UPSINTENVSTAT

Tag Name	Object ID	Data Type	Access
Status.iemStatusContactName_01	1.3.6.1.4.1.318.1.1.10.2.3.4.1.2:1	**String**	Read Only
Status.iemStatusContactName_02	1.3.6.1.4.1.318.1.1.10.2.3.4.1.2:2	**String**	Read Only
Status.iemStatusContactNumber_01	1.3.6.1.4.1.318.1.1.10.2.3.4.1.1:1	**Long**	Read Only
Status.iemStatusContactNumber_02	1.3.6.1.4.1.318.1.1.10.2.3.4.1.1:2	**Long**	Read Only
Status.iemStatusContactsNumContacts	1.3.6.1.4.1.318.1.1.10.2.3.3.0:0	**Long**	Read Only
Status.iemStatusContactStatus_01	1.3.6.1.4.1.318.1.1.10.2.3.4.1.3:1	**Long**	Read Only
Status.iemStatusContactStatus_02	1.3.6.1.4.1.318.1.1.10.2.3.4.1.3:2	**Long**	Read Only
Status.iemStatusProbeCurrentHumid_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.6:1	**Long**	Read Only
Status.iemStatusProbeCurrentTemp_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.4:1	**Long**	Read Only
Status.iemStatusProbeHighHumidViolation_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.9:1	**Long**	Read Only
Status.iemStatusProbeHighTempViolation_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.7:1	**Long**	Read Only
Status.iemStatusProbeLowHumidViolation_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.10:1	**Long**	Read Only
Status.iemStatusProbeLowTempViolation_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.8:1	**Long**	Read Only
Status.iemStatusProbeName_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.2:1	**String**	Read Only
Status.iemStatusProbeNumber_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.1:1	**Long**	Read Only
Status.iemStatusProbesNumProbes	1.3.6.1.4.1.318.1.1.10.2.3.1.0:0	**Long**	Read Only
Status.iemStatusProbeStatus_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.3:1	**Long**	Read Only
Status.iemStatusProbeTempUnits_01	1.3.6.1.4.1.318.1.1.10.2.3.2.1.5:1	**Long**	Read Only
Status.iemStatusRelayName_01	1.3.6.1.4.1.318.1.1.10.2.3.7.1.2:1	**String**	Read Only
Status.iemStatusRelayNumber_01	1.3.6.1.4.1.318.1.1.10.2.3.7.1.1:1	**Long**	Read Only
Status.iemStatusRelaysNumRelays	1.3.6.1.4.1.318.1.1.10.2.3.6.0:0	**Long**	Read Only
Status.iemStatusRelayStatus_01	1.3.6.1.4.1.318.1.1.10.2.3.7.1.3:1	**Long**	Read Only

Group: UPSOUTLETGRP

Tag Name	Object ID	Data Type	Access
upsOutletGroupConfigIndex_01	1.3.6.1.4.1.318.1.1.1.12.2.2.1.1:1	**Long**	Read Only
upsOutletGroupConfigName_01	1.3.6.1.4.1.318.1.1.1.12.2.2.1.2:1	**String**	Read/Write
upsOutletGroupConfigPowerOffDelay_01	1.3.6.1.4.1.318.1.1.1.12.2.2.1.4:1	**Long**	Read/Write
upsOutletGroupConfigPowerOnDelay_01	1.3.6.1.4.1.318.1.1.1.12.2.2.1.3:1	**Long**	Read/Write
upsOutletGroupConfigRebootDuration_01	1.3.6.1.4.1.318.1.1.1.12.2.2.1.5:1	**Long**	Read/Write
upsOutletGroupConfigTableSize	1.3.6.1.4.1.318.1.1.1.12.2.1.0:0	**Long**	Read Only
upsOutletGroupControlCommand_01	1.3.6.1.4.1.318.1.1.1.12.3.2.1.3:1	**Long**	Read/Write
upsOutletGroupControlIndex_01	1.3.6.1.4.1.318.1.1.1.12.3.2.1.1:1	**Long**	Read Only
upsOutletGroupControlName_01	1.3.6.1.4.1.318.1.1.1.12.3.2.1.2:1	**String**	Read Only
upsOutletGroupControlTableSize	1.3.6.1.4.1.318.1.1.1.12.3.1.0:0	**Long**	Read Only
upsOutletGroupStatusCommandPending_01	1.3.6.1.4.1.318.1.1.1.12.1.2.1.4:1	**Long**	Read Only
upsOutletGroupStatusGroupState_01	1.3.6.1.4.1.318.1.1.1.12.1.2.1.3:1	**Long**	Read Only
upsOutletGroupStatusIndex_01	1.3.6.1.4.1.318.1.1.1.12.1.2.1.1:1	**Long**	Read Only
upsOutletGroupStatusName_01	1.3.6.1.4.1.318.1.1.1.12.1.2.1.2:1	**String**	Read Only
upsOutletGroupStatusTableSize	1.3.6.1.4.1.318.1.1.1.12.1.1.0:0	**Long**	Read Only

Group: UPSOUTPUT

Tag Name	Object ID	Data Type	Access
upsAdvOutputCurrent	1.3.6.1.4.1.318.1.1.1.4.2.4.0:0	**DWord**	Read Only
upsAdvOutputFrequency	1.3.6.1.4.1.318.1.1.1.4.2.2.0:0	**DWord**	Read Only
upsAdvOutputLoad	1.3.6.1.4.1.318.1.1.1.4.2.3.0:0	**DWord**	Read Only
upsAdvOutputVoltage	1.3.6.1.4.1.318.1.1.1.4.2.1.0:0	**DWord**	Read Only
upsBasicOutputPhase	1.3.6.1.4.1.318.1.1.1.4.1.2.0:0	**Long**	Read Only
upsBasicOutputStatus	1.3.6.1.4.1.318.1.1.1.4.1.1.0:0	**Long**	Read Only

Group: UPSPHASE

Tag Name	Object ID	Data Type	Access
upsPhaseNumInputs	1.3.6.1.4.1.318.1.1.1.9.2.1.0:0	**Long**	Read Only
upsPhaseNumOutputs	1.3.6.1.4.1.318.1.1.1.9.3.1.0:0	**Long**	Read Only
upsPhaseResetMaxMinValues	1.3.6.1.4.1.318.1.1.1.9.1.1.0:0	**Long**	Read/Write

Group: UPSPNS

Tag Name	Object ID	Data Type	Access
powerNetSoftwareOid	1.3.6.1.4.1.318.1.2.1.1.2.0:0	**String**	Read Only
powerNetSoftwareSystemDescription	1.3.6.1.4.1.318.1.2.1.1.1.0:0	**String**	Read Only
powerNetSoftwareSystemUpTime	1.3.6.1.4.1.318.1.2.1.1.3.0:0	**DWord**	Read Only

Tag Name	Object ID	Data Type	Access
powerNetSoftwareTableSize	1.3.6.1.4.1.318.1.2.1.2.1.0:0	**Long**	Read Only

Group: UPSRAU

Tag Name	Object ID	Data Type	Access
rARUStatusAruDeviceCount	1.3.6.1.4.1.318.1.1.14.3.1.0:0	**Long**	Read Only
rARUStatusSysTempUnits	1.3.6.1.4.1.318.1.1.14.3.2.0:0	**Long**	Read Only

Group: UPSRPDU

Tag Name	Object ID	Data Type	Access
rPDUIdentDATEOfManufacture	1.3.6.1.4.1.318.1.1.12.1.4.0:0	**String**	Read Only
rPDUIdentFirmwareRev	1.3.6.1.4.1.318.1.1.12.1.3.0:0	**String**	Read Only
rPDUIdentHardwareRev	1.3.6.1.4.1.318.1.1.12.1.2.0:0	**String**	Read Only
rPDUIdentModelNumber	1.3.6.1.4.1.318.1.1.12.1.5.0:0	**String**	Read Only
rPDUIdentName	1.3.6.1.4.1.318.1.1.12.1.1.0:0	**String**	Read/Write
rPDUIdentSerialNumber	1.3.6.1.4.1.318.1.1.12.1.6.0:0	**String**	Read Only
rPDULoadDevMaxPhaseLoad	1.3.6.1.4.1.318.1.1.12.2.1.1.0:0	**Long**	Read Only
rPDULoadDevNumPhases	1.3.6.1.4.1.318.1.1.12.2.1.2.0:0	**Long**	Read Only
rPDUOutletDevColdstartDelay	1.3.6.1.4.1.318.1.1.12.3.1.2.0:0	**Long**	Read/Write
rPDUOutletDevCommand	1.3.6.1.4.1.318.1.1.12.3.1.1.0:0	**Long**	Read/Write
rPDUOutletDevNumCntrlOutlets	1.3.6.1.4.1.318.1.1.12.3.1.3.0:0	**Long**	Read Only
rPDUPowerSupply1Status	1.3.6.1.4.1.318.1.1.12.4.1.1.0:0	**Long**	Read Only
rPDUPowerSupply2Status	1.3.6.1.4.1.318.1.1.12.4.1.2.0:0	**Long**	Read Only

Group: UPSSCG

Tag Name	Object ID	Data Type	Access
.upsSCGActiveMembershipStatus	1.3.6.1.4.1.318.1.1.1.10.1.2.0:0	**Long**	Read/Write
.upsSCGMembershipGroupNumber	1.3.6.1.4.1.318.1.1.1.10.1.1.0:0	**Long**	Read/Write
.upsSCGMultiCastIP	1.3.6.1.4.1.318.1.1.1.10.1.5.0:0	**String**	Read/Write
.upsSCGNumOfGroupMembers	1.3.6.1.4.1.318.1.1.1.10.2.1.0:0	**Long**	Read Only
.upsSCGPowerSynchronizationDelayTime	1.3.6.1.4.1.318.1.1.1.10.1.3.0:0	**Long**	Read/Write
.upsSCGReturnBatteryCapacityOffset	1.3.6.1.4.1.318.1.1.1.10.1.4.0:0	**Long**	Read/Write

Group: UPSSPDU

Tag Name	Object ID	Data Type	Access
sPDUIdentDATEOfManufacture	1.3.6.1.4.1.318.1.1.4.1.3.0:0	**String**	Read Only
sPDUIdentFirmwareRev	1.3.6.1.4.1.318.1.1.4.1.2.0:0	**String**	Read Only
sPDUIdentHardwareRev	1.3.6.1.4.1.318.1.1.4.1.1.0:0	**String**	Read Only
sPDUIdentModelNumber	1.3.6.1.4.1.318.1.1.4.1.4.0:0	**String**	Read Only

Tag Name	Object ID	Data Type	Access
sPDUIdentMSPTableSize	1.3.6.1.4.1.318.1.1.6.1.1.0:0	**Long**	Read Only
sPDUIdentSerialNumber	1.3.6.1.4.1.318.1.1.4.1.5.0:0	**String**	Read Only
sPDUIdentVMTableSize	1.3.6.1.4.1.318.1.1.5.1.1.0:0	**Long**	Read Only
sPDUMasterConfigMSPTableSize	1.3.6.1.4.1.318.1.1.6.3.1.0:0	**Long**	Read Only
sPDUMasterConfigPDUName	1.3.6.1.4.1.318.1.1.4.3.3.0:0	**String**	Read/Write
sPDUMasterConfigPowerOn	1.3.6.1.4.1.318.1.1.4.3.1.0:0	**Long**	Read/Write
sPDUMasterConfigReboot	1.3.6.1.4.1.318.1.1.4.3.2.0:0	**Long**	Read/Write
sPDUMasterConfigVMTableSize	1.3.6.1.4.1.318.1.1.5.3.1.0:0	**Long**	Read Only
sPDUMasterControlMSPTableSize	1.3.6.1.4.1.318.1.1.6.2.1.0:0	**Long**	Read Only
sPDUMasterControlSwitch	1.3.6.1.4.1.318.1.1.4.2.1.0:0	**Long**	Read/Write
sPDUMasterControlVMTableSize	1.3.6.1.4.1.318.1.1.5.2.1.0:0	**Long**	Read Only
sPDUMasterPending	1.3.6.1.4.1.318.1.1.4.2.3.0:0	**String**	Read Only
sPDUMasterState	1.3.6.1.4.1.318.1.1.4.2.2.0:0	**String**	Read Only
sPDUMasterStatusMSPTableSize	1.3.6.1.4.1.318.1.1.6.4.1.0:0	**Long**	Read Only
sPDUMasterStatusVMTableSize	1.3.6.1.4.1.318.1.1.5.4.1.0:0	**Long**	Read Only
sPDUOutletConfigTableSize	1.3.6.1.4.1.318.1.1.4.5.1.0:0	**Long**	Read Only
sPDUOutletControlTableSize	1.3.6.1.4.1.318.1.1.4.4.1.0:0	**Long**	Read Only

Group: UPSSTATE

Tag Name	Object ID	Data Type	Access
upsAdvStateAbnormalConditions	1.3.6.1.4.1.318.1.1.1.11.2.1.0:0	**String**	Read Only
upsAdvStateDP300ESpecificFaults	1.3.6.1.4.1.318.1.1.1.11.2.3.0:0	**String**	Read Only
upsAdvStateSymmetra3PhaseSpecificFaults	1.3.6.1.4.1.318.1.1.1.11.2.2.0:0	**String**	Read Only
upsBasicStateOutputState	1.3.6.1.4.1.318.1.1.1.11.1.1.0:0	**String**	Read Only

Group: UPSTEST

Tag Name	Object ID	Data Type	Access
upsAdvTestCalibrationDATE	1.3.6.1.4.1.318.1.1.1.7.2.7.0:0	**String**	Read Only
upsAdvTestCalibrationResults	1.3.6.1.4.1.318.1.1.1.7.2.6.0:0	**Long**	Read Only
upsAdvTestDiagnostics	1.3.6.1.4.1.318.1.1.1.7.2.2.0:0	**Long**	Read/Write
upsAdvTestDiagnosticSchedule	1.3.6.1.4.1.318.1.1.1.7.2.1.0:0	**Long**	Read/Write
upsAdvTestDiagnosticsResults	1.3.6.1.4.1.318.1.1.1.7.2.3.0:0	**Long**	Read Only
upsAdvTestLastDiagnosticsDATE	1.3.6.1.4.1.318.1.1.1.7.2.4.0:0	**String**	Read Only
upsAdvTestRuntimeCalibration	1.3.6.1.4.1.318.1.1.1.7.2.5.0:0	**Long**	Read/Write

Group: UPSTRAPCNFG

Tag Name	Object ID	Data Type	Access
Config.acceptThisReceiver_01	1.3.6.1.4.1.318.2.1.2.1.5:1	**Long**	Read/Write
Config.acceptThisReceiver_02	1.3.6.1.4.1.318.2.1.2.1.5:2	**Long**	Read/Write
Config.acceptThisReceiver_03	1.3.6.1.4.1.318.2.1.2.1.5:3	**Long**	Read/Write
Config.acceptThisReceiver_04	1.3.6.1.4.1.318.2.1.2.1.5:4	**Long**	Read/Write
Config.communityString_01	1.3.6.1.4.1.318.2.1.2.1.3:1	**String**	Read/Write
Config.communityString_02	1.3.6.1.4.1.318.2.1.2.1.3:2	**String**	Read/Write
Config.communityString_03	1.3.6.1.4.1.318.2.1.2.1.3:3	**String**	Read/Write
Config.communityString_04	1.3.6.1.4.1.318.2.1.2.1.3:4	**String**	Read/Write
Config.mconfigBOOTPEnabled	1.3.6.1.4.1.318.2.1.3.0:0	**Long**	Read Only
Config.mconfigClockDate	1.3.6.1.4.1.318.2.1.6.1.0:0	**String**	Read/Write
Config.mconfigClockTime	1.3.6.1.4.1.318.2.1.6.2.0:0	**String**	Read/Write
Config.mconfigNumTrapReceivers	1.3.6.1.4.1.318.2.1.1.0:0	**Long**	Read Only
Config.mconfigTFTPServerIP	1.3.6.1.4.1.318.2.1.4.0:0	**String**	Read/Write
Config.mcontrolRestartAgent	1.3.6.1.4.1.318.2.2.1.0:0	**Long**	Read/Write
Config.mfiletransferConfigFTPServerAddress	1.3.6.1.4.1.318.2.4.2.3.1.0:0	**String**	Read/Write
Config.mfiletransferConfigFTPServerPassword	1.3.6.1.4.1.318.2.4.2.3.3.0:0	**String**	Read/Write
Config.mfiletransferConfigFTPServerUser	1.3.6.1.4.1.318.2.4.2.3.2.0:0	**String**	Read/Write
Config.mfiletransferConfigSettingsFilename	1.3.6.1.4.1.318.2.4.2.1.1.0:0	**String**	Read/Write
Config.mfiletransferConfigTFTPServerAddress	1.3.6.1.4.1.318.2.4.2.2.1.0:0	**String**	Read/Write
Config.mfiletransferControlInitiateFileTransfer	1.3.6.1.4.1.318.2.4.3.1.0:0	**Long**	Read/Write
Config.mfiletransferStatusLastTransferResult	1.3.6.1.4.1.318.2.4.1.1.0:0	**Long**	Read Only
Config.newCodeAuthentViaTFTP	1.3.6.1.4.1.318.2.1.5.0:0	**Long**	Read Only
Config.receiverAddr_01	1.3.6.1.4.1.318.2.1.2.1.2:1	**String**	Read/Write
Config.receiverAddr_02	1.3.6.1.4.1.318.2.1.2.1.2:2	**String**	Read/Write
Config.receiverAddr_03	1.3.6.1.4.1.318.2.1.2.1.2:3	**String**	Read/Write
Config.receiverAddr_04	1.3.6.1.4.1.318.2.1.2.1.2:4	**String**	Read/Write
Config.receiveTrapType_01	1.3.6.1.4.1.318.2.1.2.1.6:1	**Long**	Read/Write
Config.receiveTrapType_02	1.3.6.1.4.1.318.2.1.2.1.6:2	**Long**	Read/Write
Config.receiveTrapType_03	1.3.6.1.4.1.318.2.1.2.1.6:3	**Long**	Read/Write
Config.receiveTrapType_04	1.3.6.1.4.1.318.2.1.2.1.6:4	**Long**	Read/Write
Config.severity_01	1.3.6.1.4.1.318.2.1.2.1.4:1	**Long**	Read Only
Config.severity_02	1.3.6.1.4.1.318.2.1.2.1.4:2	**Long**	Read Only
Config.severity_03	1.3.6.1.4.1.318.2.1.2.1.4:3	**Long**	Read Only
Config.severity_04	1.3.6.1.4.1.318.2.1.2.1.4:4	**Long**	Read Only

Trap Messages

An SNMP agent within an SNMP-enabled device can send trap messages to report serious events to a management control system. Any system with an IP address can be configured to receive trap messages. Trap messages may be sent to up to four management systems.

When the Bulletin 1609 UPS model is selected, the following Object IDs can be used to set the IP address of the management control systems that are to receive the trap messages.

1.3.6.1.4.1.318.2.1.2.1.2:1
1.3.6.1.4.1.318.2.1.2.1.2:2
1.3.6.1.4.1.318.2.1.2.1.2:3
1.3.6.1.4.1.318.2.1.2.1.2:4

Traps Created During Automatic Tag Generation

During automatic tag database generation, the driver generates four of the most used trap Object IDs. For more information, refer to the table below.

Object ID	Description
1.3.6.1.2.1.11:TV	This is created under "SystemTraps" group.
1.3.6.1.4.1.318.2.3.3.0:TV 1.3.6.1.4.1.318.2.3.10.0:TV 1.3.6.1.4.1.318.2.3.3.0:TV	Since these are generated by the Bulletin 1609 model devices, they are created under the "UPSTraps" group.

◉ **Note**: The Allen-Bradley 1609 UPS Driver supports a total of 10 trap tags per device.

Manually Setting Up Trap Tags

For information on setting up trap tags manually, refer to the instructions below.

1. To start, ensure that the SNMP agent is prepared to send trap messages to the host where the Allen-Bradley 1609 UPS Driver is running. For example, if the Host ID is 192.x.y.z, the SNMP agent must be configured to send trap messages to 192.x.y.x.

2. If using the Bulletin 1609 UPS model, the following Object IDs can be used to set the IP address of the management control system:

   1.3.6.1.4.1.318.2.1.2.1.2:1
   1.3.6.1.4.1.318.2.1.2.1.2:2
   1.3.6.1.4.1.318.2.1.2.1.2:3
   1.3.6.1.4.1.318.2.1.2.1.2:4

3. Next, add the desired trap tags to the server project. The format is *1.3.6.x.x.x.x.x.x.x:x*.

◉ *See Also*: *Automatic Tag Database Generation*

Error Descriptions

The following categories of messages may be generated. Click on the link for a list of the messages.

Address Validation
Communication Messages
Device Status Messages
Device Specific Messages
Automatic Tag Database Generation Messages

Address Validation

The following error/warning messages may be generated. Click on the link for a description of the message.

Missing address.
Device address <address> contains a syntax error.
Address <address> is out of range for the specified device or register.
Device address <address> is not supported by model <model name>.
Data type <type> is not valid for device address <address>.
Device address <address> is read only.

Missing address.

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically has no length.

Solution:
Re-enter the address in the client application.

Device address <address> contains a syntax error.

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically contains one or more invalid characters.

Solution:
Re-enter the address in the client application.

Address <address> is out of range for the specified device or register.

Error Type:
Warning

Possible Cause:

A tag address that has been specified statically references a location that is beyond the range of supported locations for the device.

Solution:

Verify that the address is correct; if it is not, re-enter it in the client application.

Device address <address> is not supported by model <model name>.

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically references a location that is valid for the communications protocol but not supported by the target device.

Solution:

1. Verify that the address is correct; if it is not, re-enter it in the client application.

2. Verify that the selected model name for the device is correct.

Data Type <type> is not valid for device address <address>.

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically has been assigned an invalid data type.

Solution:

Modify the requested data type in the client application.

Device address <address> is read only.

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically has a requested access mode that is not compatible with what the device supports for that address.

Solution:

Change the access mode in the client application.

Communication Messages

The following error/warning messages may be generated. Click on the link for a description of the message.

Winsock V1.1 or higher must be installed.

Winsock v1.1 or higher must be installed.

Error Type:
Fatal

Possible Cause:
The version number of the Winsock DLL found on the system is less than 1.1.

Solution:
Upgrade Winsock to version 1.1 or higher.

Device Status Messages

The following error/warning messages may be generated. Click on the link for a description of the message.

Device <device name> is not responding.
Unable to write to <address> on device <device name>.

Device <device name> is not responding.

Error Type:
Serious

Possible Cause:

1. The serial connection between the device and the Host PC is broken.

2. The communication properties for the serial connection are incorrect.

3. The named device may have been assigned an incorrect Network ID.

4. The response from the device took longer to receive than the amount of time specified in the "Request Timeout" device property.

Solution:

1. Verify the cabling between the PC and the device.

2. Verify that the specified communication properties match those of the device.

3. Verify that the Network ID given to the named device matches that of the actual device.

4. Increase the Request Timeout property value so that the entire response can be handled.

Unable to write to <address> on device <device name>.

Error Type:
Serious

Possible Cause:

1. The serial connection between the device and the Host PC is broken.

2. The communication properties for the serial connection are incorrect.

3. The named device may have been assigned an incorrect network ID.

Solution:

1. Verify the cabling between the PC and the device.

2. Verify that the specified communication properties match those of the device.

3. Verify that the Network ID given to the named device matches that of the actual device.

Device Specific Messages

The following error/warning messages may be generated. Click on the link for a description of the message.

Failed to get response from device <device> for block tag <tag>.
Failed to get response from device <device> for tag <tag>.
Failed to send request for address <address> in device <device>.
Failed to send request for block tag <tag> in device <device>.
The address <address> is configured as read only in device <device>.
The request size or the returned value for object ID <ID> in device <device> is too large.
The returned/write value for block ID <ID> in device <device> is too large.
The value written is not allowed at address <address> in device <device>.
UPS returned 'general error' for <address> in device <device>.
UPS returned 'no such name' error on block tag <tag> in device <device>. Deactivating block tag <tag>.
UPS returned 'no such name' error on <tag> in device <device>. Deactivating <tag>.
UPS returned unknown error for block tag <tag> in device <device>. Error number = <number>.
UPS returned unknown error for <address> in device <device>. Error number = <number>.

Failed to get response from device <device> for block tag <tag>.

Error Type:
Warning

Possible Cause:

1. The device was too busy processing the previous request.

2. The device may have lost the connection.

Solution:

1. The driver will automatically retry the request if the driver is set that way, and the retry may fix the problem.

2. Check the connection and connection properties.

Failed to get response from device <device> for tag <tag>.

Error Type:
Warning

Possible Cause:

1. The device was too busy processing the previous request.

2. The device may have lost the connection.

Solution:

1. The driver will automatically retry the request if the driver is set that way, and the retry may fix the problem.

2. Check the connection and connection properties.

Failed to send request for address <address> in device <device>.

Error Type:
Warning

Possible Cause:
The socket connection probably was not established.

Solution:
Check connection properties.

Failed to send request for block tag <tag> in device <device>.

Error Type:
Warning

Possible Cause:
The socket connection probably was not established.

Solution:
Check connection properties.

The address <address> is configured as Read Only in device <device>.

Error Type:

Warning

Possible Cause:

The object is configured as a Read Only item in the device even though the object is Read/Write.

Solution:

Request that the administrator change the object access type to Read/Write.

The request size or the returned value for Object ID <ID> in device <device> is too large. Try changing request size.

Error Type:

Warning

Possible Cause:

The value to be returned or attempted to be written was larger than what the SNMP protocol/driver supports.

Solution:

Change the request size. If writing a string value, try a smaller size value. The driver supports a maximum of 255 characters.

The returned/ write value for block ID <ID> in device <device> is too large. Maximum block size allowed is <size>.

Error Type:

Warning

Possible Cause:

The value to be returned or written was larger than what the SNMP protocol/driver supports.

Solution:

1. For a write value, try a smaller size value.

2. For a read value, the driver probably won't support the tag. This is because the maximum length of read values supported is 255 characters.

The value written is not allowed at address <address> in device <device>.

Error Type:

Warning

Possible Cause:

The attempted write value is probably out of range.

Solution:

Check the device manual for appropriate values that can be written to this address.

UPS returned 'general error' for <address> in device <device>.

Error Type:

Warning

Possible Cause:

Part of the packet may have been lost during the transaction which resulted in the device not reading (rejecting) the packet.

Solution:

1. The driver will automatically retry the request if the driver is set that way, and the retry may fix the problem.

2. Check both the connection and the connection properties.

The UPS returned 'no such name' error on block tag <tag> in device <device>. Deactivating block tag <tag>.

Error Type:

Warning

Possible Cause:

The device does not have any information on the requested block address.

Solution:

The driver will automatically deactivate the block tag.

The UPS returned 'no such name' error on tag <tag> in device <device>. Deactivating tag <tag>.

Error Type:

Warning

Possible Cause:

The device does not have any information on the requested address.

Solution:

The driver will automatically deactivate the tag.

The UPS returned unknown error for block tag <tag> in device <device>. Error number = <number>.

Error Type:

Warning

Possible Cause:

The device returned an error that is not listed in SNMP protocol.

Solution:

Check the connection properties.

UPS returned unknown error for <address> in device <device>. Error number = <number>.

Error Type:
Warning

Possible Cause:
The device returned an error that is not listed in SNMP protocol.

Solution:
Check the connection properties.

Automatic Tag Database Generation Messages

The following error/warning messages may be generated. Click on the link for a description of the message.

Unable to generate a tag database for device <device name>

Unable to generate a tag database for device <device name>.

Error Type:
Warning

Possible Cause:
Memory required for database generation could not be allocated. The process is cancelled.

Solution:
Close unused applications and/or increase the amount of virtual memory and try again.

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