



QUICK GUIDE

MS1-DM-ASCO

7/15/2025

Table of Contents

- 1. DATA MONITORING GUIDE.....3**
- 2. FAQs.....4**
 - 2.1 HOW CAN I GET TECHNICAL SUPPORT?4
 - 2.2 DO I NEED TO INSTALL ANY SOFTWARE TO USE THE DM APPLICATION?.....4
- 3. ASSEMBLY5**
 - 3.1 POWER SUPPLIES5
 - 120VAC5
- 4. QUICK START GUIDE.....6**
 - 4.1 WHAT YOU NEED.....6
 - 4.2 INITIAL SETUP STEPS6
 - 4.2.1 Step 1: Power On6
 - 4.2.2 Step 2: Connect to the DM.....6
 - 4.2.3 Step 3: Log In.....7
 - 4.2.4 Step 4: Add or Change IP Address.....7
 - 4.3 TIPS FOR NEW USERS8
- 5. SYSTEM CONFIGURATION CENTER.....9**
 - 5.1 CONFIGURATION HIERARCHY9
 - 5.2 VIEW OPTIONS.....9
 - 5.3 ADDING A LOCATION.....9
 - 5.4 ADDING A GROUP9
 - 5.4.1 Group Headers10
 - 5.5 ADDING A UNIT10
- 6. SNMP OIDS13**
 - 6.1 SNMP WALK15

1. Data Monitoring Guide

The Data Monitoring (DM) Guide — your comprehensive resource for setting up, configuring, and optimizing your Pythia Technologies monitoring solution. Whether you're a first-time user or an experienced user, this guide is designed to help you get the most out of your system with minimal need for technical support.

The DM is a powerful, web-based platform designed for remote monitoring and intelligent control of IT and OT equipment. With support for industry-standard protocols such as Modbus/TCP, BACnet/IP, and SNMP, the DM allows seamless integration into your facility's OT Systems (BAS/BMS) or IT Systems (NMS). The system also supports direct monitoring of dry contact alarms, analog sensors, and networked equipment — all accessible through an intuitive browser-based interface.

What Makes DM Unique?

- No proprietary software required — access everything via a web interface.
- Designed for non-technical and technical users alike, with simplified views for status and detailed configuration tools for integrators.
- Scalable to support up to 100s of monitored units across a wide variety of communication protocols.
- Configurable failover, lead-lag rotation, and temperature staging for environmental control redundancy.

What's in This Version?

- Optional BuiltLayer's BuiltStack Application Output for AI Integration
 - The DM now supports drag-and-drop AI Integration, making it easier than ever to integrate with modern AI systems such as ChatGPT and Claude. Users can upload output and feed it directly into AI models for automated analysis, predictive maintenance, anomaly detection, or documentation generation. This feature is designed to bring intelligent automation into your IT/OT operational workflows — no coding or scripting required.

Who Should Use This Guide?

- Site Managers and Facility Engineers who need to maintain real-time environmental control.
- IT Professionals and System Integrators deploying DM into complex network environments.
- General Users or Operators who require simple status updates, alerts, and visual indicators.

Our goal is to empower you with all the tools and knowledge needed to use DM independently and confidently — without needing to call technical support for routine tasks.

2. FAQs

2.1 How can I get technical support?

Technical support is available Monday through Friday, 9:00 a.m. to 3:00 p.m. Eastern Time, by calling 740-363-2272. You can also reach us via our website at: <https://pythiatech.com/support>. There, you'll find a support contact form, documentation downloads, and additional resources.

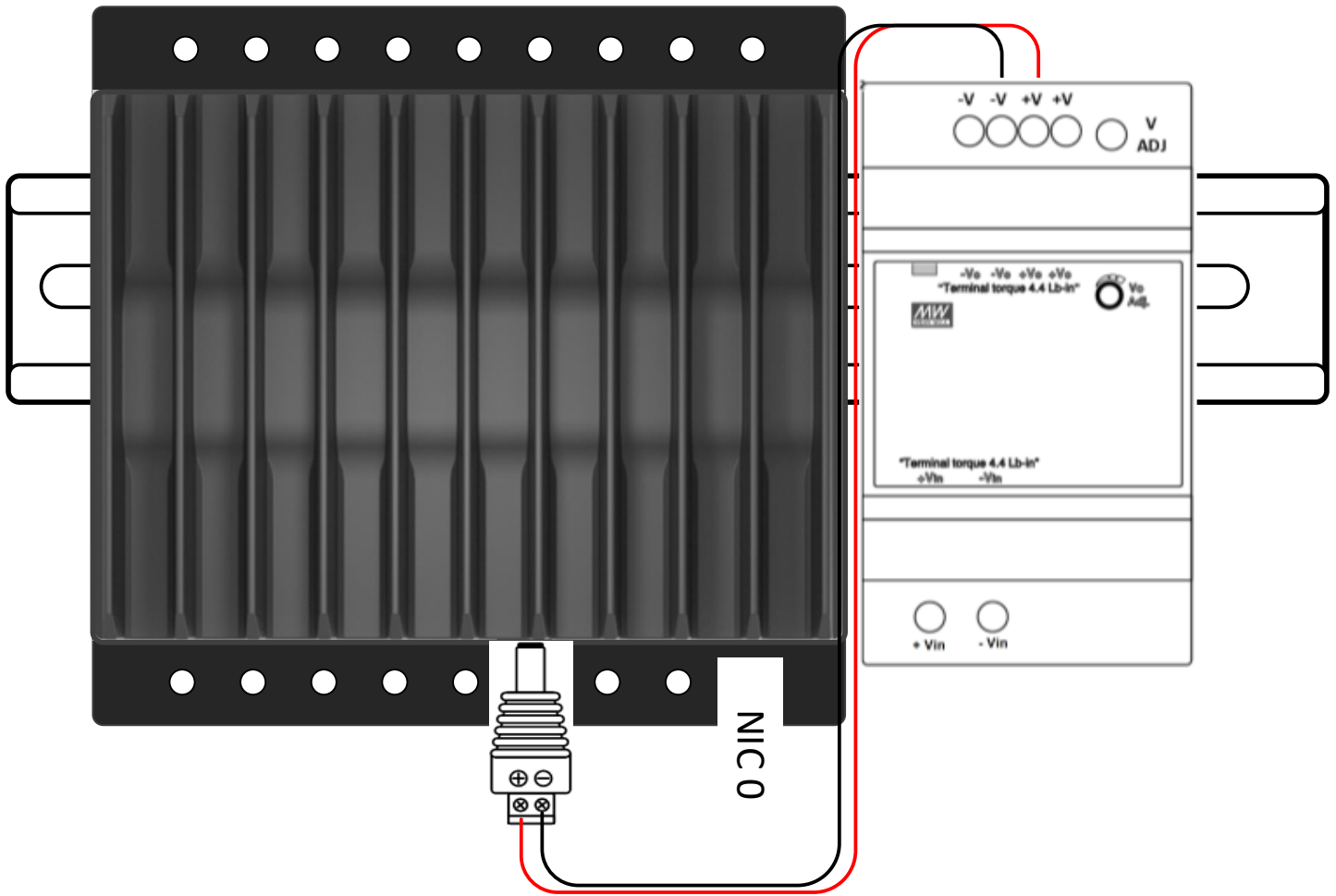
Support Agreements

If your organization maintains an active Pythia Support Agreement, you enjoy enhanced coverage—priority phone and email assistance, and complimentary firmware and software updates. To establish, renew, or upgrade a support agreement, please contact your Support at 740-363-2272 or email support@pythiatech.com; we'll be happy to help.

2.2 Do I need to install any software to use the DM application?

No additional software or plugins are required. The DM system is fully web-based and accessible from any modern browser on desktop, tablet, or smartphone.

3. Assembly



3.1 Power Supplies

120VAC

The 120VAC power supply is the Meanwell HDR-60-24. Refer to <https://www.meanwell.com/productPdf.aspx?i=753> for specifications.

4. Quick Start Guide

This section provides everything you need to get your DM system up and running — fast. Whether you’re performing an initial setup or verifying operation after deployment, the steps below will walk you through the essentials.

4.1 What You Need

Before beginning, make sure you have:

- Access to the DM console.
- A computer, tablet, or iPad with a web browser installed.
- Ethernet cable (for direct or network connection).
- Default login credentials (see below).

4.2 Initial Setup Steps

4.2.1 Step 1: Power On

Ensure the DM is connected to power. The system will boot automatically.

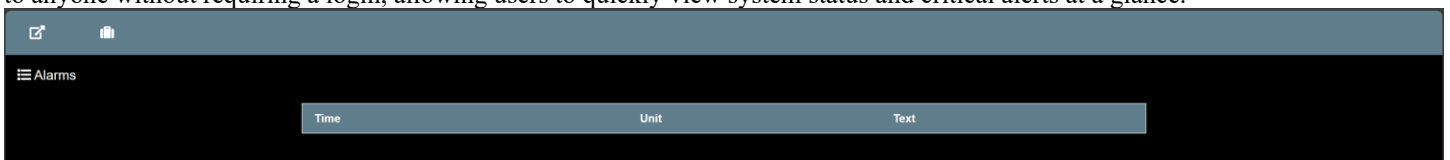
4.2.2 Step 2: Connect to the DM

- Plug your laptop directly into Port 0 using an Ethernet cable



- Configure your computer with the following network settings:
 - IP Address: 192.168.0.100
 - Subnet Mask: 255.255.0.0
- Open a web browser and navigate to: <http://192.168.0.221>.

This is the system's default landing page. It displays a real-time list of all currently active alarms. The page is read-only and accessible to anyone without requiring a login, allowing users to quickly view system status and critical alerts at a glance.



To access the DM Console, click the Launch icon located in the upper-left corner of the screen.

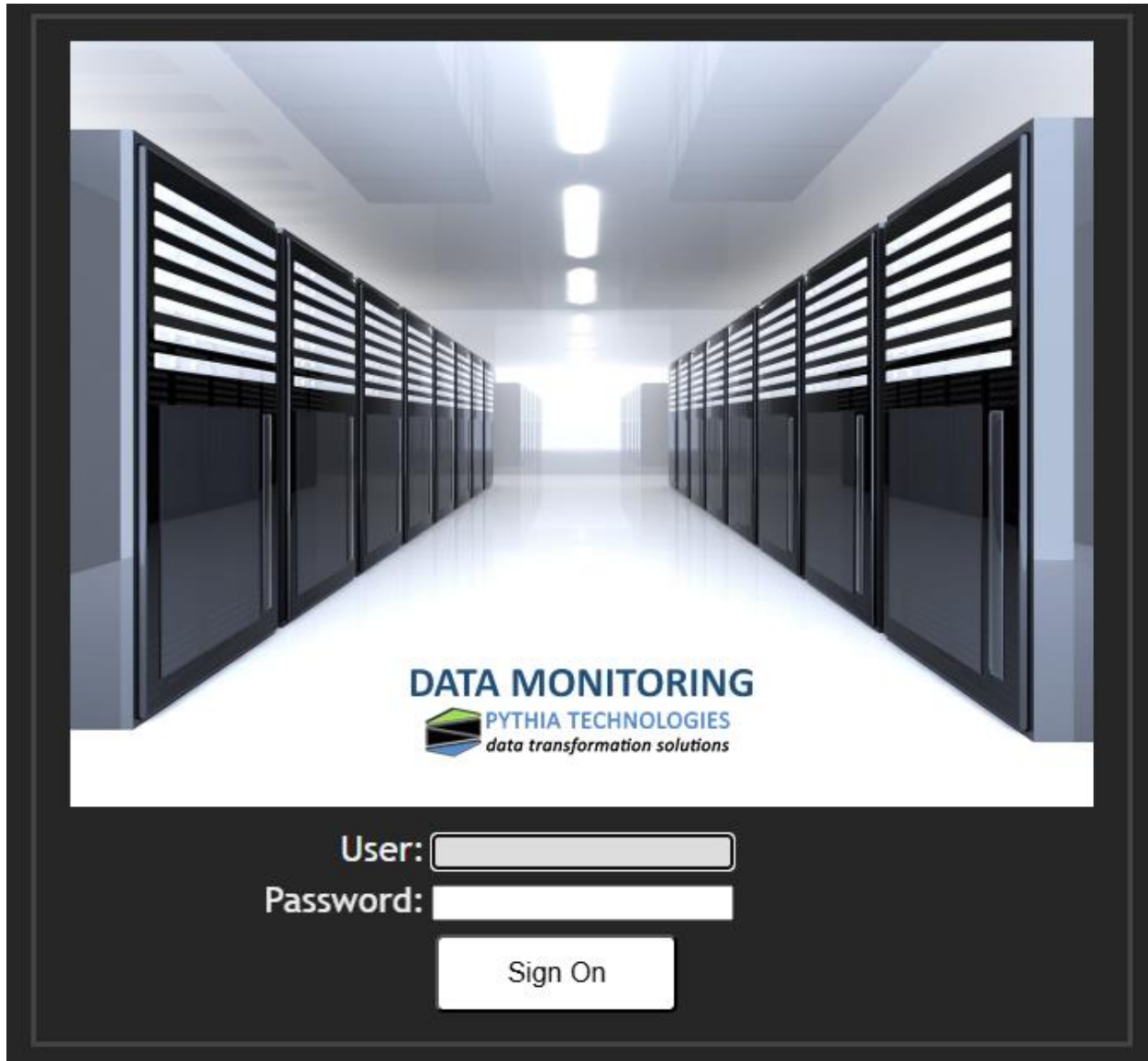


You will be directed to the full configuration and monitoring interface.

4.2.3 Step 3: Log In

Username: admin

Password: admin



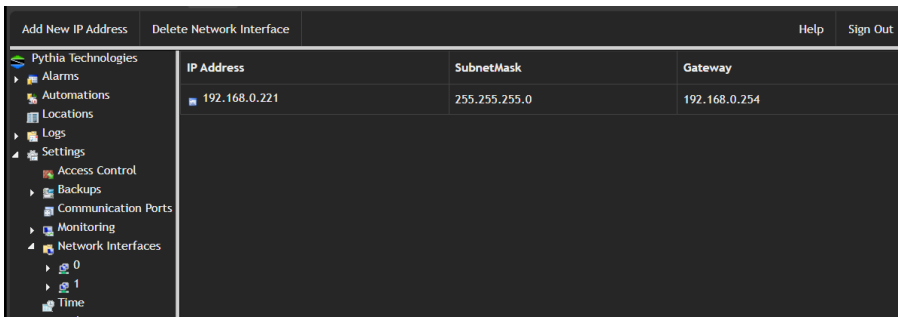
4.2.4 Step 4: Add or Change IP Address

4.2.4.1 Web-Configured Networking (Default)

- This version allows IP addresses to be added, changed, or deleted directly through the DM website under the Network Interfaces container.
- Note: This version does not currently support DHCP.
- It is the default configuration for both DM Smart Panels and most standard DM system installations.


4.2.4.2 Changing IP Address through Web Console

To add or change the IP address of your DM system, navigate to the Network Interfaces section, located under the Settings Center. This interface lets you change the panel's IP address directly through the web browser.



 Add a New IP Address

- Navigate to Settings > Network Interfaces.
- Select interface "0".
- Click "Add New IP Address".
- Enter the desired IP Address, Subnet Mask, and Gateway.
- Click Save to apply the settings.

 Delete an Existing IP Address

After adding and saving the new address, go back to the IP Address list, select the old one, and click the Delete IP Address tab.

 Restart the DM

Go to Network Interfaces > Properties, select Apply, then click Save.

Property	Value	Description
Apply	<input checked="" type="checkbox"/>	Apply Changes and Restart System After Network Settings Change
DNS	<input type="text"/>	Domain Name Server

The DM system will automatically restart to apply the new network settings.

DNS: This setting defines the DNS (Domain Name System) server used by the panel to resolve domain names. By default, it is set to 8.8.8.8 (Google Public DNS). If your network requires a specific DNS server, enter the desired IP address here to override the default.

 Tips & Considerations

- Always verify you're on the correct subnet before accessing the configuration web page.
- The default access IP is http://192.168.0.221. If inaccessible, check your cabling and ensure your PC is on the 192.168.0.x subnet.
- Restarting the DM after network changes is required for the new configuration to take effect.
- Ensure that firewall rules allow access to the new IP if managing remotely.

4.3 Tips for New Users

- Use default IP settings for easy diagnostics before assigning static IPs.
- Hover over tabs in the web interface for tooltips and guidance.
- Back up your configuration using a USB stick before making major changes.

5. System Configuration Center

The System Configuration Center is where you define and organize the monitoring architecture of the DM system. All monitored equipment—whether physical devices, sensors, or control points—is structured into a clear and scalable hierarchy of Locations, Groups, and Units. This flexible container system allows you to build an intuitive layout that reflects your facility's actual organization, operational structure, or monitoring strategy.

5.1 Configuration Hierarchy

Location Containers represent physical areas such as data centers, cities, buildings, rooms, or closets.

Group Containers are used to categorize equipment by type (e.g., Power, Environmental), function, or responsibility (e.g., by rack, by floor, by tenant).

Unit Containers represent individual monitored devices such as UPS systems, air conditioners, sensors, or panels. Units are always assigned to a Group.

You can name each container according to your own naming conventions, providing full flexibility for multi-site, multi-tenant, or specialized environments.

5.2 View Options

By default, all containers display a List View of their contents. However, for Location, Group, and Unit containers, optional custom Graphics can be purchased and configured for a visual dashboard experience.

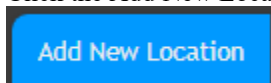
Icons indicate unit or container status:

- Green = Normal
- Red = Alarm/Abnormal
- Gray = Unknown or Unmonitored

5.3 Adding a Location

To create a new Location:

- Click the Add New Location tab.



- Enter a unique identifier, and optionally add a code and description.

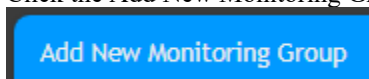
Property	Value	Description
Location	<input type="text"/>	Location Identifier
Enable	<input type="checkbox"/>	Enable Location for Monitoring
Code	<input type="text"/>	Location Code
Description	<input type="text"/>	Location Description

- Click the Save tab.

5.4 Adding a Group

To group related units (e.g., all UPS units or all environmental sensors):

- Click the Add New Monitoring Group tab.



- Enter the Group Identifier, enable the group, and provide a description.

Property	Value	Description
Group	<input type="text"/>	Group Identifier
Enable	<input type="checkbox"/>	Enable Group for Monitoring
Type	Generic ▾	Group Type
Description	<input type="text"/>	Group Description

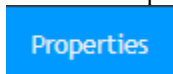
- Click the Save tab.

You can customize the column headers in the group list view. By default, the headers are Unit, Status, and Description, but up to five additional columns can be added to show specific data points from the unit’s Data container.

◆ Note: Column names must exactly match data point names defined under each unit’s Data container.

5.4.1 Group Headers

- Click the Properties tab in the group container.



- Enter the additional header names.

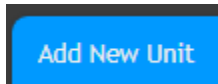
Property	Value	Description
Enable	<input checked="" type="checkbox"/>	Enable Group for Monitoring
Type	Generic	Group Type
Header 1	<input type="text"/>	Column Header 1
Header 2	<input type="text"/>	Column Header 2
Header 3	<input type="text"/>	Column Header 3
Header 4	<input type="text"/>	Column Header 4
Header 5	<input type="text"/>	Column Header 5
Summary	<input type="text"/>	Summary Automation
Description	Listing of Environmentals	Group Description

- Click the Save tab.

5.5 Adding a Unit

To add a device to the system:

- Click Add New Unit within the appropriate group.



- Enter a Unit Identifier.
- Assign it to a Virtual Network.

- Select a Protocol Driver Template from the installed list.
 - ASC_GRP5 – ASCO Group 5 Controller
 - ASC_GRP5G – ASCO Group G Controller

Property	Value	Description
Unit	ATS-01	Unit Identifier
Network	NET-01	Virtual Network
Driver	MBT_ASC_GRP5	Unit Interface Driver

- Click the Save tab.
- Click Properties to configure the unit’s standard and driver-specific settings.

Property	Value	Description
Enable	<input checked="" type="checkbox"/>	Enable Unit for Monitoring
Network	NET-01	Virtual Monitoring Network
Driver	MBT_ASC_GRP5	Unit Interface Driver
IP Address	192.168.0.1	Unit IP Address
Modbus	1	Unit Modbus Address
Code		Unit Code
Alarms	<input checked="" type="checkbox"/>	Add Alarms Container
Data	<input checked="" type="checkbox"/>	Add Data Container
Offset		Modbus Register Offset
Description		Unit Description
URL Open		URL to Open Unit in Browser
UID		Universal Identifier

- Click the Save tab.

ATS-01 - ASCO ATS

DATA			ALARMS	
Auxiliary On Normal	YES	(Stat)	Auxiliary on Emergency	Normal
Emergency Available	NO	(Stat)	CTTS Exetended Parallel	Normal
Emergency Frequency	0.00	(Hz)	CTTS Failure to Synch	Normal
Emergency Voltage AB	0.00	(V)	CTTS Transfer Switch Locked Out	Normal
Emergency Voltage BC	0.00	(V)	Emergency Breaker Tripped	Normal
Emergency Voltage CA	0.00	(V)	Generator running	Normal
Main On Normal	YES	(Stat)	Main on Emergency	Normal
Normal Frequency	59.99	(Hz)	Normal Breaker Tripped	Normal
Normal Voltage AB	476.00	(V)	Normal Not Available	Normal
Normal Voltage BC	477.00	(V)		
Normal Voltage CA	474.00	(V)		
Normal Voltage Unbalance	0.00	(%)		
Phase Shift	18.00	(deg)		



6. SNMP OIDs

SNMP OIDs are also located in the Pythia Console in the \Settings\Mappings\SNMP container.



In the example below, the first ATS unit is shown. The base OID is 1.3.6.1.4.1.38801.4.

The OID format is 1.3.6.1.4.1.38801.4.X.Y.Z











- X: Unit Unique Identifier

Object Identifier	Description
 1	Test\Group\ATS-01
 2	Test\Group\ATS-02

- Y: 1 = Alarms, 2= Data

Object Identifier	Description
 1	Alarms
 2	Data

- Z: .1 for both Alarms and Data reference Unit Status. .2 and greater are alarms and data points
 - Alarms .1 = Unit Communications 0=Normal, 1=Loss of Communications

Object Identifier	Description
 1	Unit Communications 0=Normal, 1=Loss of Communications
 10	Normal Not Available
 2	Auxiliary on Emergency
 3	CTTS Exetended Parallel
 4	CTTS Failure to Synch
 5	CTTS Transfer Switch Locked Out
 6	Emergency Breaker Tripped
 7	Generator running
 8	Main on Emergency
 9	Normal Breaker Tripped

- Data .1 = Unit Status 0=Disabled, 1=Normal, 2=Alarm

Object Identifier	Description
 1	Unit Status 0=Disabled, 1=Normal, 2=Alarm
 10	Normal Voltage CA
 11	Normal Voltage Unbalance
 12	Phase Shift
 2	Auxiliary On Normal
 3	Emergency Available
 4	Emergency Frequency
 5	Emergency Voltage CA
 6	Main On Normal
 7	Normal Frequency
 8	Normal Voltage AB
 9	Normal Voltage BC

Example SNMP Get OIDs

- Unit 1, Communications Status: 1.3.6.1.4.1.38801.4.1.1.1.0
- Unit 2, Communications Status: 1.3.6.1.4.1.38801.4.2.1.1.0
- Unit 1, Normal Voltage AB: .1.3.6.1.4.1.38801.4.1.2.10.0
- Unit 2, Normal Voltage AB: .1.3.6.1.4.1.38801.4.2.2.10.0

6.1 SNMP Walk

Name/OID	Value	Type
.1.3.6.1.4.1.38801.4.1.1.1	0	Integer
.1.3.6.1.4.1.38801.4.1.1.2	0	Integer
.1.3.6.1.4.1.38801.4.1.1.1	0	Integer
.1.3.6.1.4.1.38801.4.1.1.4	0	Integer
.1.3.6.1.4.1.38801.4.1.1.5	0	Integer
.1.3.6.1.4.1.38801.4.1.1.6	0	Integer
.1.3.6.1.4.1.38801.4.1.1.7	0	Integer
.1.3.6.1.4.1.38801.4.1.1.8	0	Integer
.1.3.6.1.4.1.38801.4.1.1.9	0	Integer
.1.3.6.1.4.1.38801.4.1.1.10	0	Integer
.1.3.6.1.4.1.38801.4.1.2.1	1	Integer
.1.3.6.1.4.1.38801.4.1.2.2	1	Integer
.1.3.6.1.4.1.38801.4.1.2.3	0	Integer
.1.3.6.1.4.1.38801.4.1.2.4	0	Integer
.1.3.6.1.4.1.38801.4.1.2.5	0	Integer
.1.3.6.1.4.1.38801.4.1.2.6	0	Integer
.1.3.6.1.4.1.38801.4.1.2.7	0	Integer
.1.3.6.1.4.1.38801.4.1.2.8	1	Integer
.1.3.6.1.4.1.38801.4.1.2.9	60	Integer
.1.3.6.1.4.1.38801.4.1.2.10	476	Integer
.1.3.6.1.4.1.38801.4.1.2.11	477	Integer
.1.3.6.1.4.1.38801.4.1.2.12	474	Integer
.1.3.6.1.4.1.38801.4.1.2.13	0	Integer
.1.3.6.1.4.1.38801.4.1.2.14	18	Integer
.1.3.6.1.4.1.38801.4.2.1.1	0	Integer
.1.3.6.1.4.1.38801.4.2.1.2	0	Integer
.1.3.6.1.4.1.38801.4.2.1.3	0	Integer
.1.3.6.1.4.1.38801.4.2.1.4	0	Integer
.1.3.6.1.4.1.38801.4.2.1.5	0	Integer
.1.3.6.1.4.1.38801.4.2.2.1	1	Integer
.1.3.6.1.4.1.38801.4.2.2.2	1	Integer
.1.3.6.1.4.1.38801.4.2.2.3	0	Integer
.1.3.6.1.4.1.38801.4.2.2.4	0	Integer
.1.3.6.1.4.1.38801.4.2.2.5	0	Integer