

DAX View iX10 User Manual

6 NOV 2020

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1. System Description and Scope of Work

1.1 Overview of EMS System



DAXView iX10 is an advanced facility monitoring and fault detection system. IoT Cloud ready to scale from a small number of in building nodes, to a large number of distributed nodes across multiple facilities. DAXView iX10 is expandable to support an extensive range of monitoring endpoints.

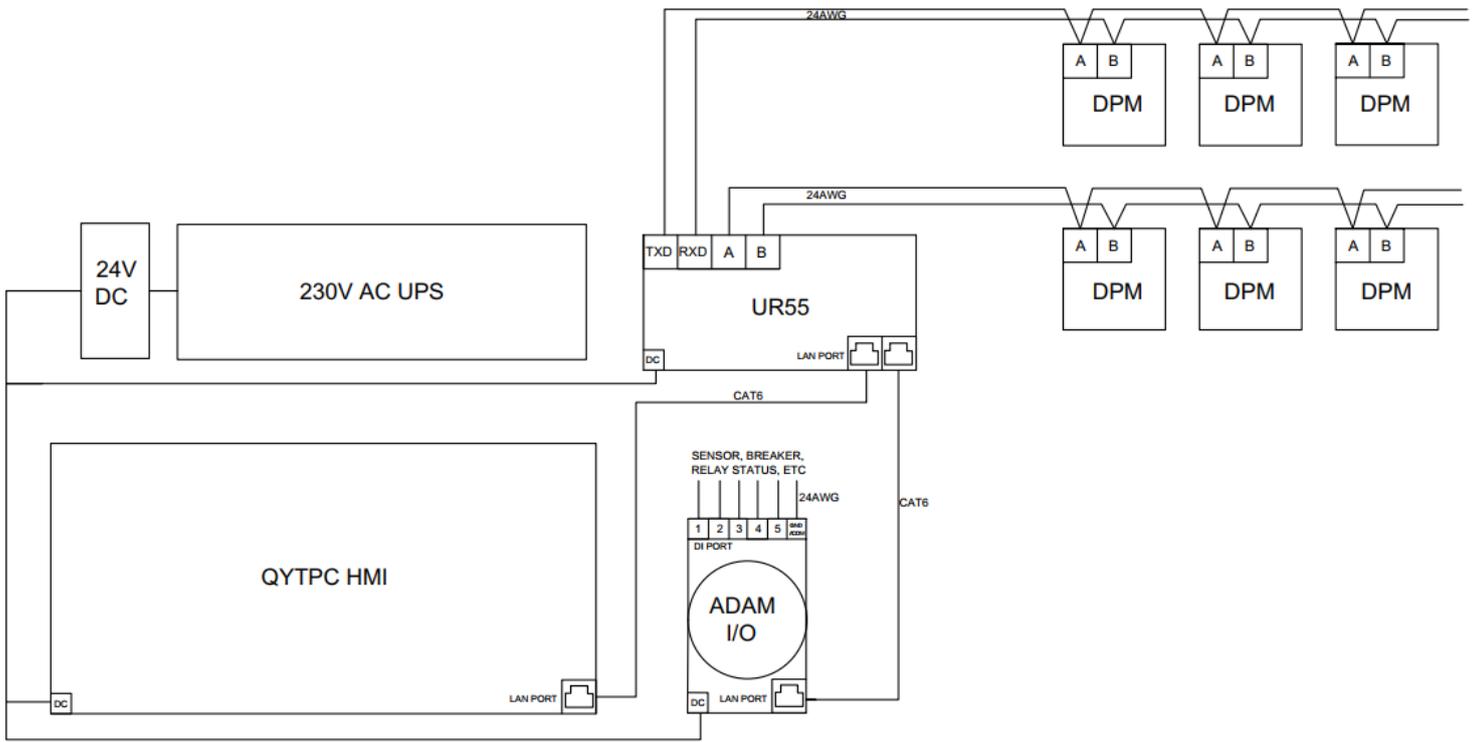
Timely notification of equipment fault is the key in managing facility KPI to prevent unplanned service downtime. The DAXView iX10 is designed to be easily integrated to electrical and environmental monitoring infrastructure and provide advanced remote monitoring functions in a compact package size.

Equipment faults are unpredictable and a proactive resolution can be applied before a problem strikes. The iX10 provides continuous data collection from power meters, water meters, protection relay and environment sensors to build a long-term energy & behavioural profile of the facility. Fault incident, tripping of circuit breaker, abnormal sensor level is detected immediately by iX10, which sends SMS and Email alerts to the operation team. Events are logged into memory and allow user to review at a later time.

Intelligent FMS

- Real time event notification
- Equipment operation trend logging
- Anomaly pattern pre-fault detection
- IoT Cloud ready
- MH Protection Relay integrated

1.2 System Diagram

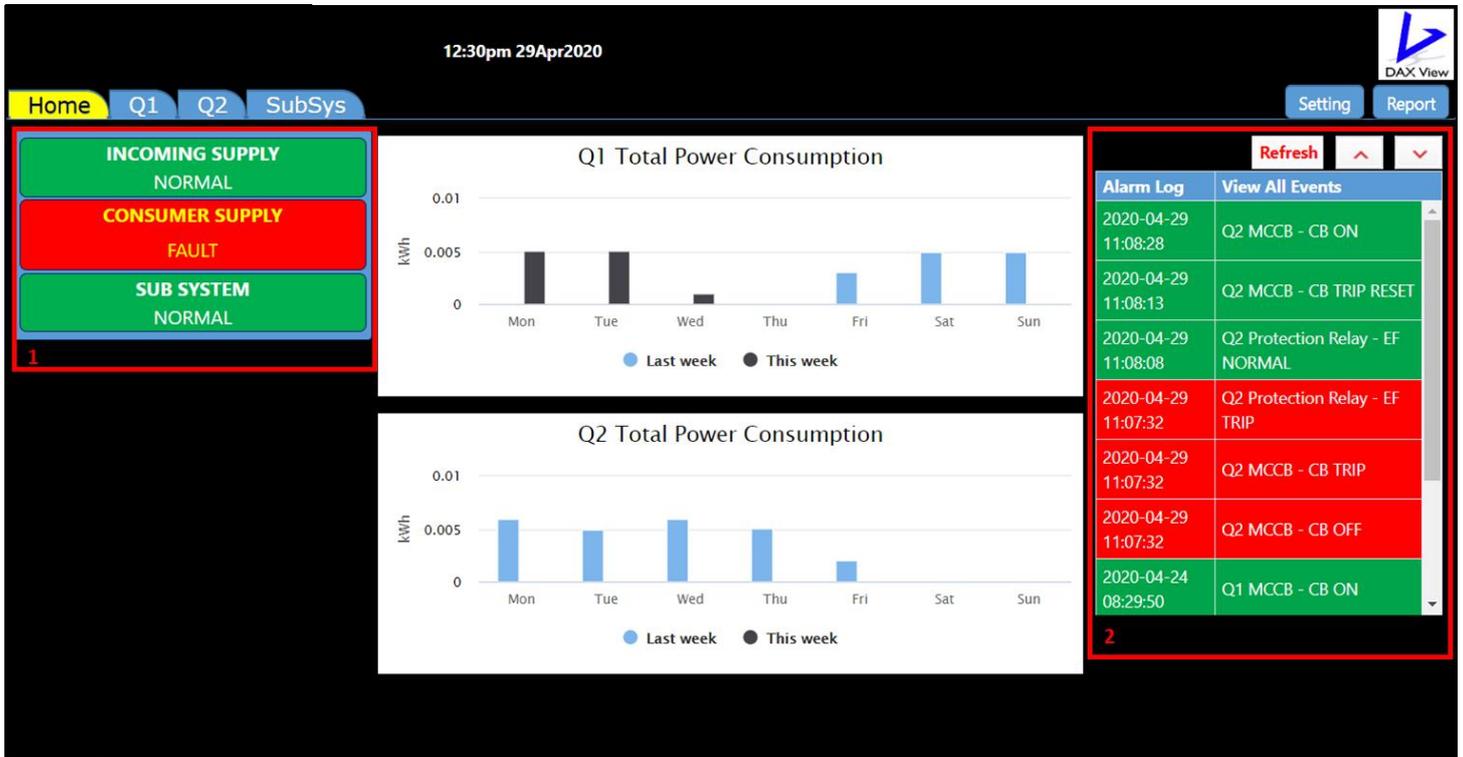


1.3 Material List

	Equipment/Component	Description	Model
1	I/O Data Acquisition Module	16Channels DI	ADAM-6251
2	Uninterrupted Power Supply	230V AC UPS	APC
3	4G Router c/w antenna	Router	UR55
4	Industrial Grade Touch Panel PC	11.6" Colour Display	PPC-P116BW
5	DC Power Supply	24V DC Supply	HDR-60-24

2. Operation Manual

2.1 Homepage



If iX10 is integrated with any energy monitoring device, such as digital power meter, the total power consumption bar chart overview will be displayed at the center.

1. Grouping status: indicate red alert when any device or connection in the group fails;
2. Alarm and operation log: display the recent alarm and the action normalizing the system.

2.2 Sub-page

The screenshot displays a software interface with a dark background. At the top center, the time and date '10:25am 06Jan2020' are shown. On the right, there is a 'DAX View' logo and two buttons labeled 'Setting' and 'Report'. A horizontal navigation bar at the top contains tabs for 'Home', 'Q1', 'Q2', and 'SubSys', with a small red box labeled '1' next to the 'SubSys' tab. Below this, two data blocks are visible, each with a red box labeled '2' around its 'more info' link. The first block is titled 'Q1 - 600A 3PN MAIN INCOMING MCCB' and the second is 'Q1-1 - 160A 3PN MCCB RISER 1'. Both blocks display status indicators like 'CB ON', 'EF Normal', 'OC Normal', and power consumption values such as '0.00kWh' and '0.00kW'. A red box labeled '3' is positioned at the bottom left of the data blocks area.

Q1 - 600A 3PN MAIN INCOMING MCCB	Q1-1 - 160A 3PN MCCB RISER 1
CB ON	CB ON
EF Normal	ELR Normal
OC Normal	--
0.00kWh	0.00kWh
0.00kW	0.00kW
more info	more info

1. Tab for sub pages;
2. Selection for detailed information related to this block;
3. Block for each connection (main incoming, feeders, etc) or device (water leakage sensors, temperature sensors).

2.3 Detailed page

The screenshot displays the DAX View interface. At the top, the time is 12:32pm on 29Apr2020. The navigation bar includes Home, Q1, Q2 (selected), and SubSys. There are Setting and Report buttons on the right. A left sidebar contains a < Go Back button and a list of Q2 sub-items: Q2, Q2-1, Q2-4, and Q2-4-19 (selected). The main area features an Alarm Log table with columns for time and event description. A date range selector on the right includes Start Date (2020-03-01), End Date (2020-04-29), and an Update button. A Save button is also present. Red boxes highlight the sidebar (1), the table (2), and the date selector (3).

Alarm Log	View All Events
2020-04-02 21:02:28	Q2-4-19 - CB OFF
2020-04-02 11:30:30	Q2-4-19 - CB ON
2020-03-30 21:04:05	Q2-4-19 - CB OFF
2020-03-30 13:18:25	Q2-4-19 - CB ON
2020-03-27 21:10:14	Q2-4-19 - CB OFF
2020-03-26 11:17:05	Q2-4-19 - CB ON
2020-03-25 10:22:42	Q2-4-19 - CB OFF

1. Selection of each device's or connection's individual alarm log;
2. Display of the recent alarm and the action normalizing the system;
3. Selection of showing alarm and operation in certain date range. When USB device is inserted to iX10, 'Save' button can save the current screenshot to it.

2.4 Setting – User management

01:54pm 29Apr2020

Home Q1 Q2 SubSys

Setting Report

Setting User Management Import List

#	Contact Name	Login ID	Mobile	Email	State	Receive Alarm?	Receive Email?	
1	Chee	chee			Active	Y	Y	Edit
2	Wayne	wayne			Active	Y	Y	Edit
3	Eddie	eddie			Active	Y	Y	Edit

Create User

In “Setting” section:

1. Create new user profile;
2. Edit existing user profile;

12:34pm 29Apr2020

Home Q1 Q2 SubSys

Setting Report

Setting User Management Import List

Create User

User Detail - Edit

Delete Save Cancel

User Id	2	Contact Name	Wayne
Login ID	wayne	Password	Password
Email	Email	Mobile	Mobile
User PIN	User PIN	State	<input type="radio"/> Active <input checked="" type="radio"/> Inactive
Receive Alarm?	<input type="radio"/> Y <input checked="" type="radio"/> N	Alert Level	<input checked="" type="checkbox"/> High
		Receive Email?	<input type="radio"/> Y <input checked="" type="radio"/> N
		Receive Health Check SMS?	<input type="radio"/> Y <input checked="" type="radio"/> N

- Type in personal information at corresponding column.
- Select the desired ‘Alert Level’ for receiving certain level of alarm notification SMS.
- ‘State: Inactive’ temporarily disable the user function without deleting profile.
- ‘Receive Email’ let users to receive daily report of the system.
- ‘Receive Health Check SMS’ let users to receive system health check every morning.

2.5 Setting – Alarm Status

02:20pm 06Nov2020

Home FCU UPS CAS WATER DETECTION FIRE ALARM DPM

Setting Report

Setting

User Management Alarm Status Import List

Digital Input	Normal Status
IT COMMS ROOM FCU-MCR-1 ON/OFF	NO <input type="checkbox"/> NC
IT COMMS ROOM FCU-MCR-1 TRIP	NO <input type="checkbox"/> NC
IT COMMS ROOM FCU-MCR-1 HIGH TEMP	NO <input type="checkbox"/> NC
IT COMMS ROOM FCU-MCR-2 ON/OFF	NO <input type="checkbox"/> NC
IT COMMS ROOM FCU-MCR-2 TRIP	NO <input type="checkbox"/> NC
IT COMMS ROOM FCU-MCR-2 HIGH TEMP	NO <input type="checkbox"/> NC
OPEN OFFICE FCU-OFC-1 ON/OFF	NO <input type="checkbox"/> NC
OPEN OFFICE FCU-OFC-1 TRIP	NO <input type="checkbox"/> NC

Save

In “Alarm Status” section, user is able to change the contact status for each monitoring point:

“NO” stands for “Normal Open”

“NC” stands for “Normal Close”

System will reboot to take effect.

OK Cancel

Waiting for 192.168.76.159...

System will reboot after clicking “Save” to take effect for the changes.

2.6 Setting – Import List

12:43pm 29Apr2020

Home Q1 Q2 SubSys Setting Report

Setting

Setting User Management Import List

Procedures:

1. Insert a USB drive with the file **import_list.xlsx** placed on the top-level directory
2. Click the below button to import list
3. This HMI will reboot to apply changes after importing

Import List

Importing... Please don't leave this page.

In this page, users can import the mapping list to fully customize the system layout by following the procedures.

1. The mapping list file need to strictly follow this name and format (.xlsx).
2. When importing mapping list, users shall not leave this page.

12:43pm 29Apr2020

Home Q1 Q2 SubSys Setting Report

Setting

Setting User Management Import List

Procedures:

1. Insert a USB drive with the file import_list.xlsx placed on the top-level directory
2. Click the below button to import list
3. This HMI will reboot to apply changes after importing

Import List

Importing... Please don't leave this page.

192.168.76.119 says
Successfully imported! This HMI will reboot after 15 seconds to apply changes.
OK

System will notify users when import completes.

Setting

Setting User Management Import List

Procedures:

1. Insert a USB drive with the file import_list.xlsx placed on the top-level directory
2. Click the below button to import list
3. This HMI will reboot to apply changes after importing

Import List

Reboot after 13 second(s). Please don't leave this page.

Users need to stay at this page to wait for the system reboot. After reboot, the change will take effect.

2.7 Report

10:42am 06Jan2020

Home Q1 Q2 SubSys

Setting Report

Logout

Generated Report

Report Date	File Name	Action
2020-01-01	general_report(20200101-20200101).xlsx	Save to USB
2019-12-31	alarm(20200101).xlsx	Save to USB
2019-12-31	general_report(20191231-20191231).xlsx	Save to USB
2019-12-30	alarm(20191231).xlsx	Save to USB
2019-12-30	general_report(20191230-20191230).xlsx	Save to USB
2019-12-29	alarm(20191230).xlsx	Save to USB
2019-12-23	general_report(20191223-20191229).xlsx	Save to USB

Plug in USB device to export the daily report. System will generate two reports each day, general report for power meter historical readings (if system is integrated with energy monitoring device) and alarm report for the whole alarm log.

2.7 Power Meter Detailed Page

If iX10 is integrated with energy monitoring device, users can see following pages in 'detailed information' under each block:

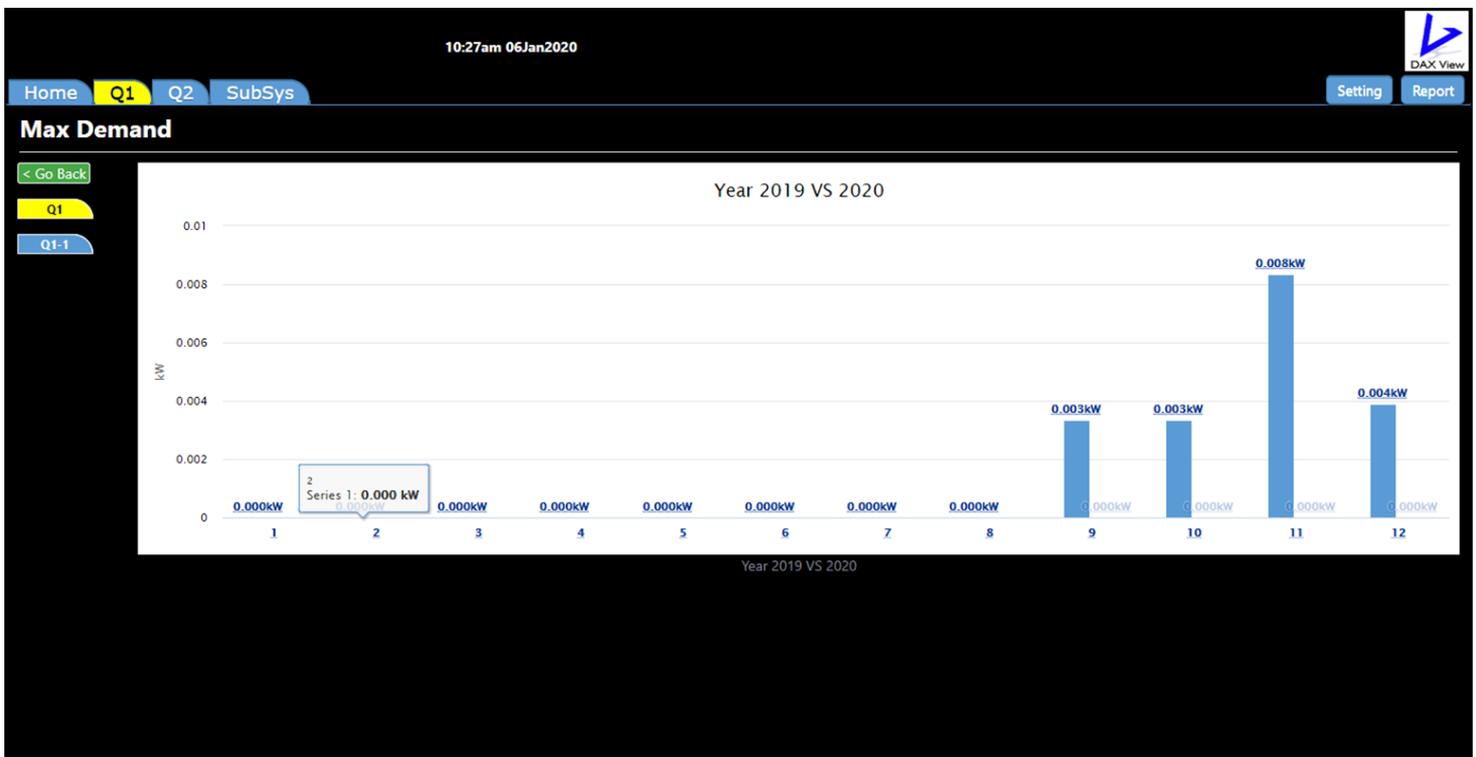
The screenshot displays the DAX View interface for a power meter. The top navigation bar includes 'Home', 'Q1', 'Q2', and 'SubSys'. The main content area is divided into three sections:

- Section 1 (Table):** A table titled 'Q1 - 600A 3PN MAIN INCOMING MCCB' showing live readings for various parameters. The table has columns for 'Max Demand' and 'Usage'.

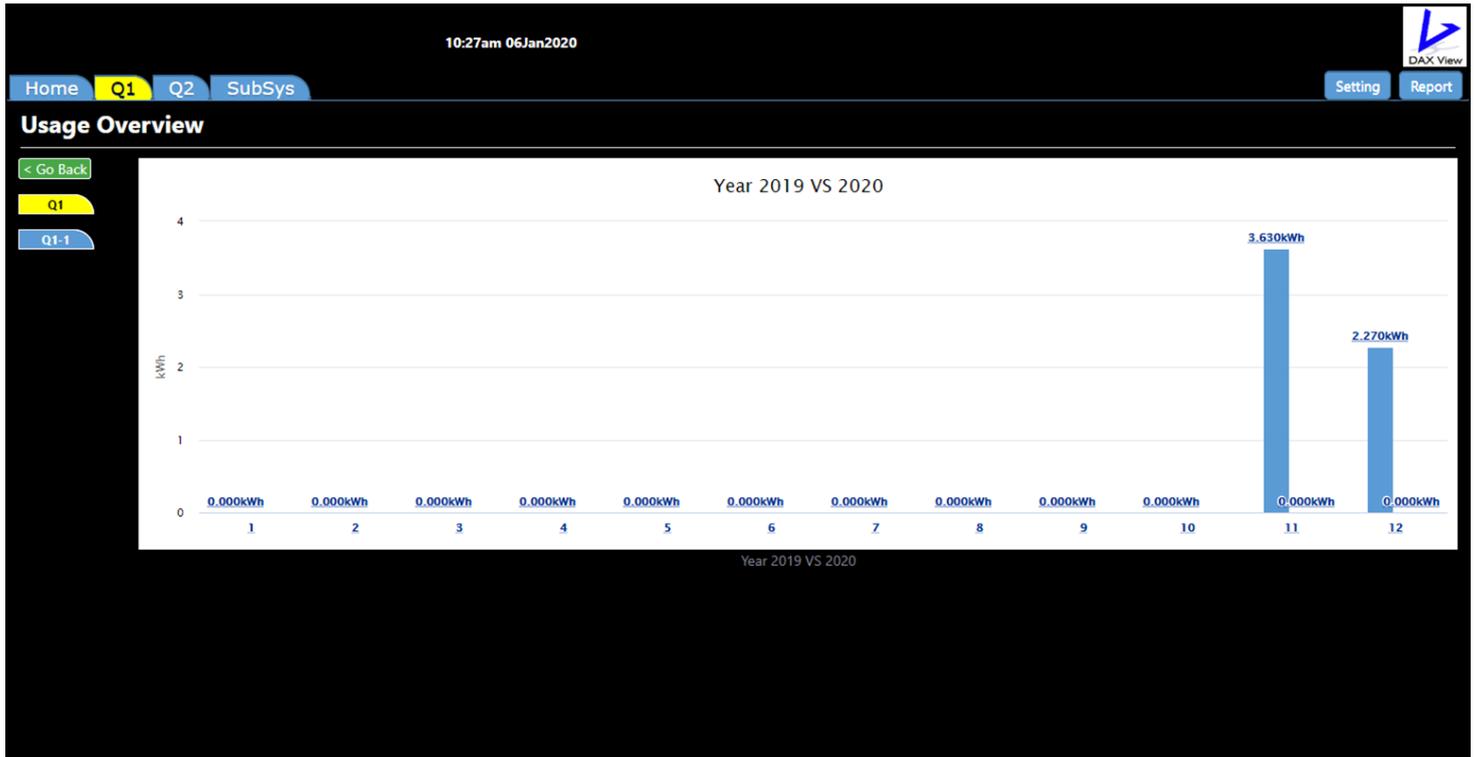
Parameter	Value	Max Demand	Usage
Line Voltage	412.47V	416.11V	414.82V
Phase Voltage	237.40V	238.89V	241.59V
Current	0.00A	0.00A	0.00A
Power Total		0.00kW	
kWh		0.00kWh	
PF		0.00	
VAR		0.00kVAR	
Modbus-TCP		--	
Modbus-RTU		--	
Device Model		--	
- Section 2 (Chart):** A bar chart titled 'Max Demand' and 'Usage' showing live readings for these two metrics.
- Section 3 (Table):** A table titled 'CB View' showing the status of various components.

Component	Status
CB Status	CB ON
EF Relay	EF Normal
OC Relay	OC Normal
Modbus-TCP	--
Modbus-RTU	--
Device Model	--

1. Live reading of energy monitoring device;
2. Barchart of 'Max Demand' and 'Usage', and Line chart of live reading;
3. Live circuit breaker and relay status.



Max Demand: bars can be clicked to go to daily and hourly reading.



Usage: bars can be clicked to go to daily and hourly reading.

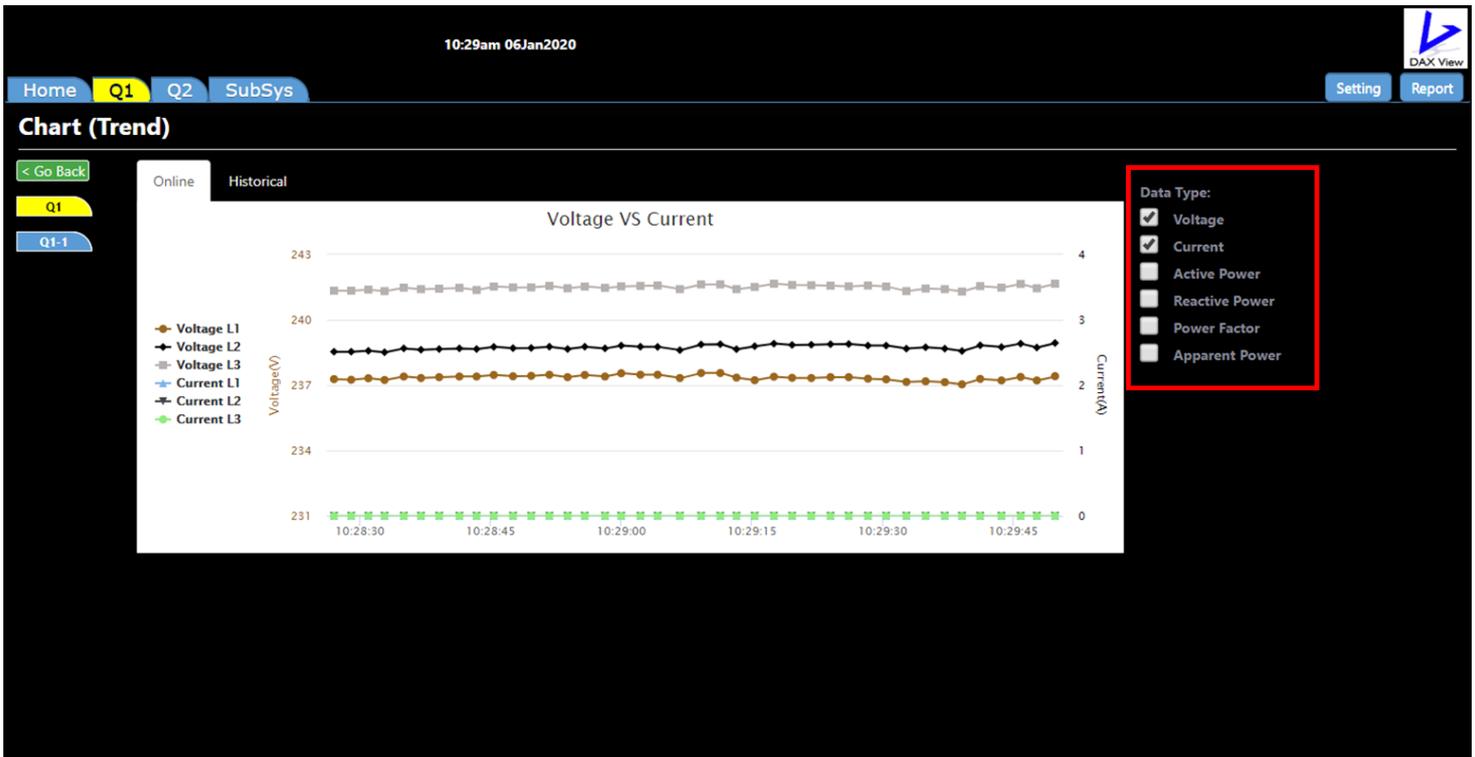


Chart: live line chart of energy monitoring device's reading. Two data types can be selected at one time to observe.



1. Selection of showing historical readings in certain date range.
2. Two data types can be selected at one time to observe.

Appendix. Components Catalogue

iX10

I/O Module



ADAM-6250



ADAM-6251



ADAM-6256



Specifications

Digital Input

- **Channels** ADAM-6250: 8
ADAM-6251: 16
- **Dry Contact** Logic 0: Open
Logic 1: Closed to DGND
- **Wet Contact** Logic 0: 0 ~ 3 V_{DC} or 0 ~ -3 V_{DC}
Logic 1: 10 ~ 30 V_{DC} or -10 ~ -30 V_{DC}
(Dry/Wet Contact decided by Switch)
- **Input Impedance** 5.2 k Ω (Wet Contact)
- **Transition Time** 0.2 ms
- **Frequency Input Range** 0.1 ~ 3kHz
- **Counter Input** 3kHz (32 bit + 1 bit overflow)
- **Keep/Discard Counter Value when power off**
- **Supports Inverted DI Status**

Digital Output

- **Channels** ADAM-6250: 7 (Sink Type)
ADAM-6256: 16 (Sink Type)
- **Output Voltage Range** 10 ~ 30 V_{DC}
- **Normal Output Current** 100 mA (per channel)
- **Pulse Output** Up to 5kHz
- **Delay Output** High-to-Low and Low-to-High

Ordering Information

- **ADAM-6250** 15-ch Isolated Digital I/O Modbus TCP Module
- **ADAM-6251** 16-ch Isolated Digital Input Modbus TCP Module
- **ADAM-6256** 16-ch Isolated Digital Output Modbus TCP Module

Common Specifications

General

- **Ethernet** 2-port 10/100 Base-TX (for Daisy Chain)
- **LED Indication** ADAM-6250: 8 DI + 7 DO
ADAM-6251: 16 DI
ADAM-6256: 16 DO
- **Protocol** Modbus/TCP, TCP/IP, UDP, HTTP, DHCP, MQTT, SNMP
- **Connector** Plug-in 5P/15P screw terminal blocks
- **Power Input** 10 ~ 30 V_{DC} (24 V_{DC} standard)
- **Watchdog Timer** System (1.6 seconds)
Communication (Programmable)
- **Dimensions** 70 x 122 x 27 mm
- **Protection** Built-in TVS/ESD protection
Power Reversal protection
Over Voltage protection: +/- 35V_{DC}
Isolation protection: 2500 V_{DC}
- **Power Consumption** ADAM-6250: 3 W @ 24 V_{DC}
ADAM-6251: 2.7 W @ 24 V_{DC}
ADAM-6256: 3.2 W @ 24 V_{DC}

Features

- Daisy chain connection with auto-bypass protection
- Remote monitoring and control with smart phone/pad
- Group configuration capability for multiple module setup
- DI/O LED Indication
- Flexible user-defined Modbus address.
- Intelligent control ability by Peer-to-Peer and GCL function
- Multiple protocol support: Modbus/TCP, TCP/IP, UDP, HTTP, DHCP, MQTT, SNMP
- Web language support: XML, HTML 5, Java Script
- System configuration backup
- User Access Control

Environment

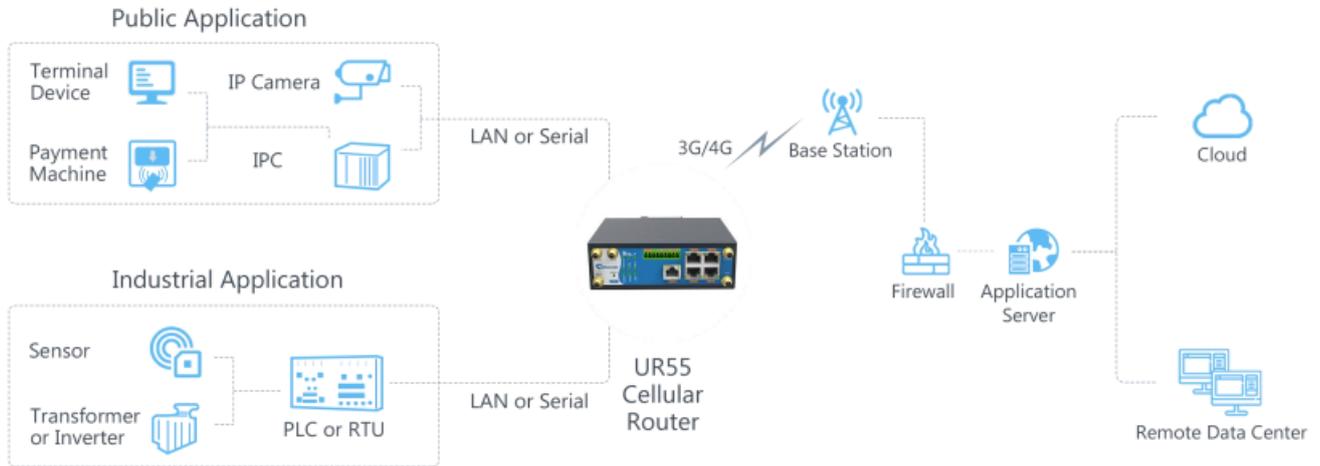
- **Operating Temperature** -10 ~ 70°C (14 ~ 158°F)
-40 ~ 70°C (-40~158°F) (B version)
- **Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)
-40 ~ 80°C (-40~176°F) (B version)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)

Back-UPS 625 Specifications	
Model Number	BX625CI-MS
Output	
Output Capacity	625 VA / 325 Watts
Output Voltage / Frequency (On utility)	230V / 45-65 Hz
Output Voltage / Frequency (On battery)	230V +/-8%, 50 or 60 Hz +/-1 Hz (auto-sensing)
Output Connections	3 "Asia universal" outlets (all with battery backup and surge protection)
Waveform Type	Stepped Approximation to Sine Wave
Input	
Input Voltage / Frequency	230V / 45-65 Hz
Input Connection	1 x 1.2M power cable with NEMA 5-15P plug
Surge Protection	
AC Power Surge Protection	All outlets
Physical	
Unit Dimensions (H x W x D)	278.5 x 160 x 88.5 mm
Unit Weight	4.8 kg
Shipping Dimensions (H x W x D)	399 x 215 x 128 mm
Shipping Weight	5.2 kg
Color	Black
UPC Code	731304308171
Battery	
Battery Type	Maintenance-free, sealed lead-acid battery, leak proof
Battery Size	12 volt, 7.0 Ah
Management	
Alarms	Visual (LED) and audible alarms
Adjustable Sensitivity and Transfer Voltage	Low, Medium (default), High

iX10

4G Modem

Application Example



Specifications

Cellular Interfaces	
Connectors	2 × 50 Ω SMA (Center PIN: SMA Female)
SIM Slots	2
Wi-Fi Interface (Optional)	
Connectors	2 × 50 Ω SMA (Center PIN: SMA Female)
Standards	IEEE 802.11b/g/n (optional: IEEE 802.11ac)
Tx Power	802.11b: 16 dBm +/-1.5 dBm (11 Mbps) 802.11g: 15 dBm +/-1.5 dBm (54 Mbps) 802.11n@2.4 GHz: 14 dBm +/-1.5 dBm (HT20 MCS7) 802.11ac@5 GHz: 10 dBm +/-2 dBm (HT80 MCS9)
Rx Sensitivity	802.11b: <= -75 dBm (11 Mbps) 802.11g: <= -68 dBm (54 Mbps) 802.11n@2.4 GHz: <= -67 dBm (HT20 MCS7) 802.11n@2.4 GHz: <= -64 dBm (HT40 MCS7) 802.11ac@5 GHz: <= -64 dBm (HT20 MCS8) 802.11ac@5 GHz: <= -55 dBm (HT40 MCS9) 802.11ac@5 GHz: <= -64 dBm (HT80 MCS9)
Modes	Support for multiple SSID, AP and Client mode
Security	WPA/WPA2 authentication, WEP/TKIP/AES encryption

iX10

4G Modem

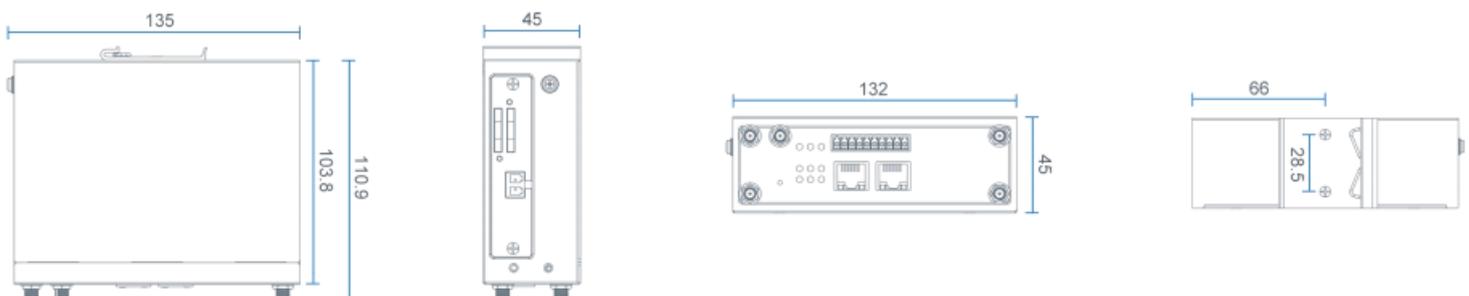
Hardware System	
CPU	528 MHz, ARM Cortex A7
Memory	128 MB Flash, 128 MB DDR3 RAM
Storage	1 × Micro SD
Ethernet Interface	
Ports	5 × RJ-45
Property	1 × WAN + 4 × LAN or 2 × WAN + 3 × LAN
Physical Layer	10/100 Base-T (IEEE 802.3)
Data Rate	10/100 Mbps (Auto-Sensing)
Interface	Auto MDI/MDIX
Mode	Full or half duplex (Auto-Sensing)
Serial Interface (Optional)	
Ports	1 × RS232 + 1 × RS485 or 2 × RS232 or 2 × RS485
Connector	Terminal block
Baud Rate	300bps to 230400bps
IO (Optional)	
Connector	(4) pin screw down terminal block
Digital	2 × DI + 2 × DO
GPS (Optional)	
Connectors	1 × 50 Ω SMA (Center PIN: SMA Female)
Sensitivity	-167dBm@Tracking, -149dBm@Acquisition, -161dBm@Re-acquisition
Position Accuracy	<2.5m CEP
Protocols	NMEA 0183, PMTK
Software	
Network Protocols	PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QOS, SNTP, Telnet, VLAN, SSH, etc.
VPN Tunnel	DMVPN/IPsec/OpenVPN/PPTP/L2TP/GRE
Access Authentication	CHAP/PAP/MS-CHAP/MS-CHAPV2
Firewall	ACL/DMZ/Port Mapping/MAC Binding
Management	Web, CLI, SMS, On-demand dial up
AAA	Radius, TACACS+, LDAP, Local Authentication
Multilevel Authority	Multiple Levels of User Authority
Reliability	VRRP, WAN Failover, Dual SIM Backup
Serial Port	Transparent (TCP Client/Server, UDP), Modbus Gateway (Modbus RTU to Modbus TCP)

iX10

4G Modem

Power Supply and Consumption	
Connector	2-pin with 5.08 mm terminal block
Input Voltage	9-48 VDC
Power Consumption	Typical 2.8 W (Max 5.0 W)
Physical Characteristics	
Ingress Protection	IP30
Housing & Weight	Metal
Dimensions	132 x 103.8 x 45 mm (5.20 x 4.09 x 1.77 in)
Mounting	Desktop, Wall or DIN Rail Mounting
Others	
Reset Button	1 × RESET
LED Indicators	1 × POWER, 1 × WLAN, 1 × STATUS, 1 × VPN, 1 × SIM1, 1 × SIM2, 3 × Signal Strength
Built-in	Watchdog, RTC
Certifications	RoHS, CE, FCC
EMC	IEC 61000-4-2 Level 3 IEC 61000-4-3 Level 4 IEC 61000-4-4 Level 3 IEC 61000-4-5 Level 4 IEC 61000-4-6 Level 3 IEC 61000-4-8 Level 4
Environmental	
Operating Temperature	-40°C to +70°C (-40°F to +158°F) Reduced Cellular Performance Above 60°C
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F

▶ Product Images/Dimensions (mm)



iX10

DC Power Supply

SPECIFICATION

MODEL		HDR-60-5	HDR-60-12	HDR-60-15	HDR-60-24	HDR-60-48	
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	48V	
	RATED CURRENT	6.5A	4.5A	4A	2.5A	1.25A	
	CURRENT RANGE	0 ~ 6.5A	0 ~ 4.5A	0 ~ 4A	0 ~ 2.5A	0 ~ 1.25A	
	RATED POWER	32.5W	54W	60W	60W	60W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	150mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	5.0 ~ 5.5V	10.8 ~ 13.8V	13.5 ~ 18V	21.6 ~ 29V	43.2 ~ 55.2V	
	VOLTAGE TOLERANCE Note.3	± 2.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LINE REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LOAD REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	SETUP, RISE TIME	500ms, 50ms/230VAC 500ms, 50ms/115VAC at full load					
	HOLD UP TIME (Typ.)	30ms/230VAC 12ms/115VAC at full load					
INPUT	VOLTAGE RANGE	85 ~ 264VAC (277VAC operational)		120 ~ 370VDC (390VDC operational)			
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	85%	88%	89%	90%	91%	
	AC CURRENT (Typ.)	1.2A/115VAC 0.8A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC		60A/230VAC			
PROTECTION	OVERLOAD	105 ~ 160% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50% ~ 100% rated output voltage, recovers automatically after fault condition is removed					
	OVER VOLTAGE	5.75 ~ 6.75V	14.2 ~ 16.2V	18.8 ~ 22.5V	30 ~ 36V	56.5 ~ 64.8V	
		Protection type : Shut down o/p voltage, re-power on to recover					
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT	± 0.03%/°C (0 ~ 50°C) RH non-condensing					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6					
	OPERATING ALTITUDE	2000 meters					
OVER VOLTAGE CATEGORY	III ; According to EN61558, EN50178, EN60664-1, EN62477-1 ; altitude up to 2000 meters						
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL62368-1, UL508, TUV EN61558-2-16, IEC62368-1, EAC TP TC 004, BSMI CNS14336-1 approved; Design refer to TUV EN62368-1					
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH					
	EMC EMISSION	Parameter	Standard			Test Level / Note	
		Conducted	EN55032(CISPR32), CNS13438			Class B	
		Radiated	EN55032(CISPR32), CNS13438			Class B	
		Harmonic Current	EN61000-3-2			Class A	
		Voltage Flicker	EN61000-3-3			-----	
	EMC IMMUNITY	EN55024, EN55035, EN61000-6-2, EN61204-3					
		Parameter	Standard			Test Level / Note	
ESD		EN61000-4-2			Level 3, 8KV air; Level 2, 4KV contact, criteria A		
Radiated Susceptibility		EN61000-4-3			Level 3, criteria A		
EFT/Burest		EN61000-4-4			Level 3, criteria A		
Surge		EN61000-4-5			Level 4, 2KV/L-N, criteria A		
Conducted		EN61000-4-6			Level 3, criteria A		
Magnetic Field		EN61000-4-8			Level 4, criteria A		
Voltage Dips and interruptions	EN61000-4-11			>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods			
OTHERS	MTBF	927.6K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	52.5*90*54.5mm (W*H*D)					
	PACKING	190g;60pcs/12.4Kg/0.97CUFT					
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p> <p>5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p>						

iX10

Industrial Touch Panel PC

Industrial grade touch screen HMI computer designed for automation control, energy management, security system and robotic system application. The product utilizes energy efficient processor, high reliability fanless design, rugged metal alloy casing that double as the system heatsink.

Features

- Intel J1900 CPU: 2.0GHz, Bay-Trail chipset
- 4GB DDR3 RAM
- 64GB Solid-state Drive SSD
- Intel HD GPU
- 11.6" TFT LCD, resolution 1366*768, 4-wire resistive touch input
- Fanless passive cooling
- Aluminium alloy frame and case, front waterproof



I/O Ports

- 2xRJ45 Ethernet Intel 82583V dual network port
- 1xVGA
- 1xHDMI
- 2xUSB 2.0
- 2xRS232
- RTL ALC662 Audio port

Operation & Installation

- | | |
|--------------------------|--|
| • DC24V Input | 20W Consumption |
| • Operating temperature | 0-60°C |
| • Operating humidity | 10-95%RH @40° C non-condensing |
| • Environment protection | IP65 (front panel mounted with rubber gasket seal) |
| • Dimension | 308mm x195mm x58mm |
| • Weight | 2.5kg |
| • Mounting | Panel mounting with rear fastening bolt |
| • Operating system | Linux Ubuntu v18 LTE |