DAX View

iX10

Intelligent Facility Management System

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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 country wide. Expandable to support diverse 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 proactive resolution can be applied before problem strike. The iX10 provides a 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 are detected immediately by iX10 which sends SMS and Email alert 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

iX10

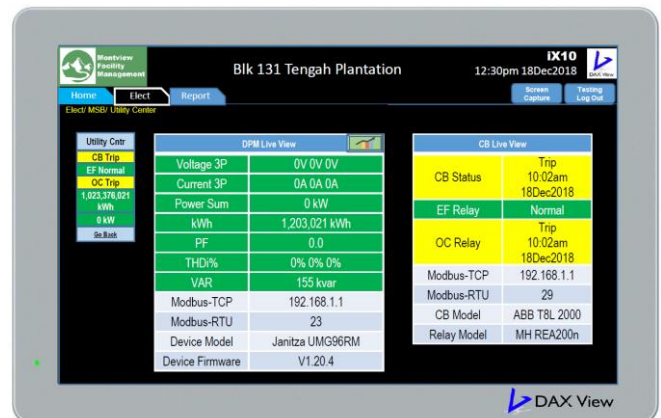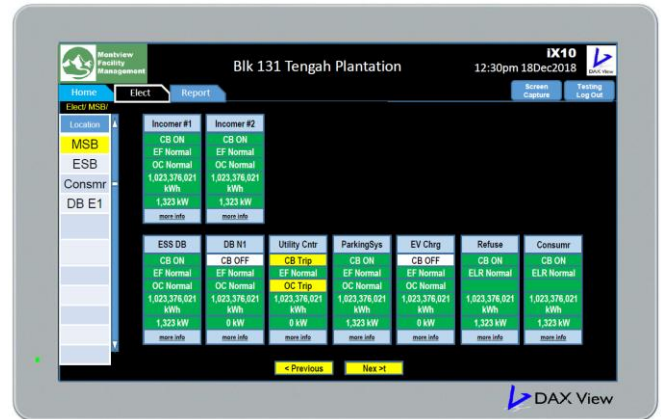## Intelligent Facility Management System

The iX10 is an industrial compact computer with a rich sets of on-board digital input/output, analog input/output, Modbus RTU and Ethernet TCP network communication interface. Industrial grade mobile network gateway that supports multi-channel sending are used in the iX10 to connect to 3G/LTE/4G network to deliver alert SMS and email. An integrated UPS supply ensure that all alert SMS will be sent regardless of main utility power supply condition. The high contrast ruggedized IP65 rated touch screen display allow local operator to read live system status, review historical event log and download trend report on to a removable storage. The iX10 can operate as a standalone local unit or as a networked intelligent remote node when it is configured with the iX10-Cloud Enabled option.

When the DAXView iX10 connects to our DAX1000 Cloud Service, the iX10 remote node become part of an intelligent analytic network which predict fault before it happens. Data are consolidated by the iX10 data uplink buffer and batch uploaded via secured encrypted protocol to reduce network transmission traffic load and prevent network attack. These data are fed to the DAX-1000 IoT Cloud Server which perform Machine Learning algorithm to pick up anomaly pattern. The DAX-1000 automatically learn and reviewing these anomaly pattern and notify the operation team on early signs of equipment malfunction before it develops into a disruption. The DAX-1000 IoT Cloud Service can be licensed as a hosted service or on premise hardware solution.

Industrial Grade

- IP65 protection level touch screen HMI
- Redundancy SIM auto failover backup mobile network
- OPC/ MQTT/ RESTapi open protocol (Cloud enabled service)
- Integrated UPS ensuring reliable SMS notification during mains supply failure

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DAXView iX10 technical specification:

Functional and System Features	iX10	iX10 (Cloud enabled)
Industrial Touch Screen computer system with 1.2GHz 64-bit Quadcore ARM Cortex-A53 processor running Linux OS	Standard	Standard
10" Resistive Touch Screen LCD display (1024x600 resolution) other resolution size available upon request	Standard	Standard
1GB RAM, 16GB Flash Disk	Standard	Standard
On-board Real Time Clock	Standard	Standard
11x On-board Digital Input	Standard	Standard
11x On-board Digital Output	Standard	Standard
4x On-board Analog Input	Standard	Standard
2x On-board Analog Output	Standard	Standard
Expandable with external module x64 Di	Optional	Optional
Expandable with external module x64 Do	Optional	Optional
Expandable with external module x32 Ai	Optional	Optional
Expandable with external module x16 Ao	Optional	Optional
1x Ethernet RJ45	Standard	Standard
3x USB.20	Standard	Standard
1x RS485	Standard	Standard
1x RS232C	Standard	Standard
Piezo sound buzzer	Standard	Standard
Audio Jack Output	Standard	Standard
Ultra-capacitor UPS power backup (10years maintenance free)	Standard	Standard
Water Resistance Rating of Touch Screen Display	IP65	IP65
Operating temperature & humidity	0°C~50°C 95%RH	0°C~50°C 95%RH
SMS Auto Paging	Standard	Standard
Email Sending	Standard	Standard
WiFi Access Point IEEE802.11b/g/n	Standard	Standard
Mobile 3G/4G router with Firewall/ DDNS function with dual SIM auto failover switching (Dual mobile SIM router optional)	Standard	Standard
DDC communication via Modbus-RTU/ Modbus-TCP	Standard	Standard
Optional DDC protocol support BACnet	Standard	Standard
Anomaly Pre-Fault Detection	Not Available	Standard
Centralized Remote Device Management	Not Available	Standard
Centralized Data Warehouse Supporting OPC-UA/ Modbus-TCP/ MQTT data pull	Not Available	Standard
Cloud Dashboard consolidated network view	Not Available	Standard
Event Acknowledgement and Workflow Assignment tracking	Not Available	Standard
Epoxy powder coated steel enclosure for wall mounting c/w lockable swing door	Standard	Standard
Power supply	230VAC 50Hz	230VAC 50Hz
Enclosure weight	12kg	12kg
Enclosure dimension	400mm (width) 600mm (height) 200mm (depth)	400mm (width) 600mm (height) 200mm (depth)
Installation	Wall Mounting	Wall Mounting

Note:

DAXView iX10-Cloud Enable require the cloud software license of DAX-1000 to perform the IoT functions. Please contact our solution team for a product walk through and a license offer proposal to suit your needs.

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