

Power Management & Reporting
 U.S. Patent 8,566,651



DESCRIPTION

FLEXPOWER iSCAN is a patented smart power management system for security and life safety applications.

The iSCAN250B-16 is designed specifically to support the dual voltage requirement of 12 and 24VDC, this unit utilizes an FPO power supply to generate 24VDC and a B100 DC-DC Class 2 power limited supply to generate 12VDC which allows the entire system to run off one battery set.

The system provides sixteen (16) activation inputs and sixteen (16) monitored and controlled relay outputs. The managed inputs are capable of voltage or dry contact activation and the managed outputs are programmable to either of the two system voltages, fail-safe, fail-secure, fire alarm over ride, and AC loss over ride for egress lock control.

Each managed output may also be individually activated or deactivated through an embedded browser interface and monitored for voltage and current values via network or internet. Adjustable trigger points are provided for each output to generate an alert when that output is outside of selected parameters. Sixteen (16) auxiliary outputs are also provided for readers, REX devices, or other similar units with each output selectable for either continuous or switched DC.

BENEFITS

- Sixteen managed relay outputs with multi-configurable modes of operation
- Sixteen auxiliary outputs for powering non critical devices like rex detectors that do not need to be monitored and controlled
- Remote power / battery monitoring, with control and reporting of outputs for
 - ◆ Current and voltage with alerts when outside preset trigger points
 - ◆ Total power consumption
 - ◆ Device ON/OFF recycling
- Microprocessor dual rate battery charger
- Built in fire alarm disconnect with latch mode for Canada
- Fault detection and reporting to host power supply and over the network
- **Lifetime Warranty**

FLEXPOWER STANDARD FEATURES

- ◆ **SmartZone** Comprehensive output monitoring, reporting and control
- ◆ **TruWatt** Delivers twice the current at 12V than at 24V
- ◆ **PwrHealth** Intelligent battery charging, monitoring and SOC testing
- ◆ **VSelect** Installer selectable output voltage
- ◆ **SureCharge** Microprocessor controlled battery charging
- ◆ **PowerCom** Power supply programming / monitoring software
- ◆ **FlexConnect** Dual voltage bus / pre-wired accessory board interconnects
- ◆ **Reliability+** Full fault protection / high efficiency / fiberglass pcb
- ◆ **GreenSmart** RoHS compliant, lead free, energy efficient design
- ◆ **NetLink** Network communication

APPLICATIONS

- **Applications**
 - ◆ Add remote lock management for banks, hospital wards, drug cabinets, high security areas, casinos, etc.
 - ◆ Live monitoring of remote or dangerous areas
 - ◆ Perform remote battery tests on scheduled / manual basis
 - ◆ Supervise locks and devices for over stress
 - ◆ Monitor power cabinet temperature
 - ◆ Monitor external area temperature with remote probe

ELECTRICAL RATINGS

Parameter	iSCAN250B		Unit
	FPO250	B100	
Input Voltage	120 / 230	–	VAC
Input Power (max)	282	–	Watts
Output Voltage	24	12	VDC
Output Current	8	4	Amps
Battery Charge Capacity	80	–	Ah
Efficiency	88	91	%
Output Ripple	120	82	mVp-p
Line Regulation	0.1	0.1	±%
Load Regulation	2	.56	±%
BTU Rating	109	10	BTU/Hr
Managed Power Outputs	16	–	
Auxiliary Power Outputs	16	–	
Fire Alarm Interface	Yes	No	

*This data sheet

Similar Products	Description
iSCAN150B-8	150W, 4A/12V and 4A/24V, 8 managed 8 aux outputs
iSCAN250B-16*	250W, 4A/12V and 8A/24V, 16 managed 16 aux outputs

iSCAN systems can be upgraded with additional accessory modules - contact factory for details and order number.

ISCAN SYSTEM STANDARD FEATURES

FAULT DETECTION AND REPORTING

The comprehensive fault detection and reporting mechanism of the FPO series provides for both local and remote fault reporting.

On-board visual indicators are provided to give immediate installer feedback. Independent form C relay contacts are provided to report AC and system fault conditions to remote or auxiliary equipment. A door tamper switch is included.

Detected Fault Conditions:

- **AC Power:** AC loss, AC low
- **DC Power and System**
 - ◆ Abnormal or loss of power supply operation
 - ◆ Over current, over temperature condition
 - ◆ DC output high, low
 - ◆ Battery Presence, Earth Ground (user optional)
 - ◆ Reversed battery condition, blown fuse or loss of output voltage on selected accessory boards (detected on the power supply)

FIRE ALARM INTERFACE (FAI)

- **Activation Methods**
 - ◆ DC voltage: 9 to 33VDC, 3 to 15mA
 - ◆ Dry contact NO/NC
- **Latch Enable:** NC contact set or switch (typically for Canadian use)

12V SECONDARY VOLTAGE MODULE

The iSCANS system provides an additional 12VDC voltage through a secondary DC-DC module either to the B2 buss for use with other accessory boards, or via its own output terminals. The DC converter is powered comes from the 24VDC output of the main power supply, allowing the battery set to back up both the 24 and 12VDC output voltages without the need for a second battery set.

Output of the B100 is current rated for 4 Amps Class 2, power limited.

AUXILIARY POWER DISTRIBUTION MODULE

- **Eight power distribution outputs** Individually programmable to a continuous output drawn from either buss 1 or buss 2, typically used to program an output for either 12 or 24VDC
 - ◆ **D8** 3A fused per output
 - ◆ **D8P** 2.5A class 2, power limited per output
- **DC Presence:** Green LED per output
- **Removable terminals:** accepts #14 to #24 AWG

ORDERING INFORMATION

Model Number	Input	Type	Enclosure Info
iSCAN250B-16	120VAC	Fused	Size: 24" x 20" x 6.5" Weight: 25 lb.
iSCAN250B-16P	120VAC	Power Limited	
iSCAN250B-16-E	230VAC	Fused	
iSCAN250B-16P-E	230VAC	Power Limited	

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MANAGED DEVICE CONTROL MODULE

- **Eight access control trip inputs**
- **Eight individually protected lock control outputs**
 - ◆ **M8** 3A fused per output
 - ◆ **M8P** 2.5A class 2, power limited per output

Each input may be programmed to respond to:

- ◆ Application of voltage between 9 and 33VDC
- ◆ Removal of voltage between 9 and 33VDC
- ◆ Normally open dry contact transition
- ◆ Normally closed dry contact transition
- ◆ Activation or deactivation through software

Each output may be programmed for the following modes:

- ◆ Voltage output from power supply one
- ◆ Voltage output from power supply two
- ◆ Fail-safe, Fail-secure
- ◆ Fire alarm over ride for egress lock control
- ◆ AC loss over ride for egress lock control
- ◆ Trigger points based on voltage or current values to send an alert via email or SNMP

NETWORK COMMUNICATION MODULE

Network Interface for Monitoring / Reporting / Controlling

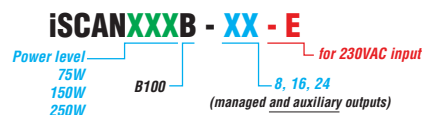
- **Network & email alerts for**
 - ◆ AC / System faults, outside preset voltage, current, and temperature settings
 - ◆ Low battery condition / Fire Alarm Interface (FAI) or External Event activation
 - ◆ Time-to-service reminders
- **100 event time & date stamp buffer** with Excel compatible reports
- **SNMP interface:** Network access of real time system parameters via SNMP v1, v2, or v3

AGENCY LISTINGS

USA
UL 294
UL 603

CANADA
ULC S318
ULC S319
CSA C22.2 #107.1
CSA 22.2 #60950

PN nomenclature



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