DISTRIBUTION SERIES 3

ICT240DB-8IRC Dual Bus Front Access Intelligent DC Load Distribution Panel

The ICT240DB-8IRC provides high current 48, 24 and 12 volt DC dual bus DC distribution capability for sites requiring IP-based remote monitoring and power control of connected loads where front access to all connections and functions is required. Each bus is rated at 120 Amps peak and provides four breaker-protected outputs. TCP/IP remote management and power control are standard, allowing remote monitoring of individual loads as well as power-cycling, rebooting, and load shedding of individually selected outputs. The integrated web server provides an intuitive, easy to use browser interface, and SNMP is supported.

Overview

The ICT240DB-8IRC Front Access DC Distribution Panel provides a dual bus, common ground 1RU solution for applications requiring remote monitoring and power control of individual loads. The on-board TCP/IP and web server provide an easy to use, graphical user interface for remote management and power control of system and individual outputs. Each bus supports up to four 30A hydraulic/magnetic breakers for 48, 24, or 12 volts DC.

Dual voltages and polarities can be supported on a single panel, useful for sites requiring -48 and +24 volts DC to be distributed simultaneously.

Alarms can be sent to multiple email accounts, and each output has definable load-shed settings. The network watchdog feature will ping a pre-determined I.P. address, such as a router, and power-cycle the device if not answered.

There are four digital inputs for connecting site monitoring sensors such as door, fire, and water alarms, and one dedicated temperature sensor input. These alarms can be given individual names and be sent as email alarm notifications.

The on-board web server means there is no software to maintain, and SNMP is also supported. Firmware can be updated remotely over the Ethernet link.

The ICT240DB-8IRC allows each connected load to be monitored, power cycled, or taken off-line. This functionality can be used to conserve power, troubleshoot devices, and reboot connected loads remotely, possibly preventing or delaying the need for an costly site visit.

Features

- 200A continuous system rating / 100A per bus
- 30A max. breakers per output at 48, 24, or 12 VDC
- TCP/IP remote management and power control of individual outputs
- Four fully managed outputs per bus
- Independent Form C alarm contacts for each bus
- Mixed voltages and polarity support
- Remote firmware update capability
- HTTPS, SMTP, SNMP protocols supported
- Monitoring and alarm reporting of each output for pinpointing of issues with connected loads
- Each output has adjustable load-shed settings
- Adjustable power-on sequencing
- Site monitoring sensor inputs with alarm reporting
- Data logging
- 2 year warranty

Applications

- LTE/Small Cell
- Radio Access Networks
- DAS
- Fixed Wireless Broadband
- RF Wireless Systems

Power Specifications

Operating Voltage Range (pos or neg ground)	10-60VDC
System Current Rating (peak/cont)	240A / 200A
A/B Bus Current Rating (peak/cont)	120A / 100A
Number of Outputs per Bus	4
Max. Breaker Size (12, 24V, 48V)	30A
Output Rating, continuous (12, 24V, 48V)	25A

Mechanical

Form Factor	1RU - 19 Inch rack mount
Dimensions L x W x H	6.4 x 19.0 x 1.7 in 163 x 483 x 44 mm
Weight (lbs/kg)	4.6 lbs / 2.1 kg
Connectors	Dual 1/4" - 20 input studs with 0.625" spacing, 30 Amp terminal blocks

Environment

Operating Temperature Range	-30°C to +60°C
Cooling	Temperature Controlled Fan

Design Standards

Safety	CSA/UL/IEC 60950-1
Emissions	EN61000-6-3, FCC Part 15 Class B limits, CE

Warranty

Two years

Communications and Control

Ethernet	TCP/IP built-in web server and graphical user interface, 10/100BASE-T, IEEE 802.3 compatible
Supported Protocols	IPv4, HTTP, HTTPS, SMTP, DNS, TCP, UDP, ICMP, DHCP, ARP, SNMP v1/v2c/v3
SNMP Ports	UDP Port 161, SNMP Traps: UDP Port 162
Firmware Upgrades	Upgradeable over Ethernet
Security	Password protection, HTTPS encryption, TLS 1.0
8 Channel Output Monitoring	Current draw measured and reported for each output, user definable under and over current alarms
Email and SMS Alerts	Multiple email or text accounts, adjustable intervals
Data Logging	Up to 30 days at 1 minute sampling rate, csv file download, major event logging
Network Watchdog	Autonomously ping up to two I.P. addresses and power-cycle output if no response, definable settings
Power Cycling and Rebooting	Remote on/off control of every output individually
Auto Restore Mode	Return to previous output settings after a power loss
Power-up Delay Sequencing	User selectable 0 to 60 second delay between outputs
Auto Load Shedding	Each output user definable, manual or auto restart

Configurable Alarms

- Channel over current threshold
- Channel over/under current
- Bus over current
- Automatic load shedding
- Bus over/under voltage threshold
- Site monitoring input contact status (4)
- Temperature over/under alarm reporting (requires ICT-TMP)

Site Monitoring Inputs

Voltage free digital inputs	4
Analog temperature input	1
Temp Sense Probe	ICT-TMP
Connector type	Cage clamp 16-26AWG

Ordering Information

Model Number	Description
ICT240DB-8IRC	Front access dual bus common ground DC distribution panel
ICT-CB5 (1)	5 Amp hydraulic/magnetic breaker
ICT-CB10 (1)	10 Amp hydraulic/magnetic breaker
ICT-CB15 (1)	15 Amp hydraulic/magnetic breaker
ICT-CB25 (1)	25 Amp hydraulic/magnetic breaker
ICT-CB30 (1)	30 Amp hydraulic/magnetic breaker
ICT-BLP (1)	Breaker Position Blanking Plate
ICT-TMP (2)	Temperature Sense Probe with 3M (10ft) cable
ICT-RA2319 (2)	ICT 23 to 19 inch, 1RU rack mount reducer kit

(1) Hydraulic/magnetic breakers and blanking plates not included, must be ordered separately.
(2) Option, orderable separately

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