ENERGY MANAGER SERIES

Intelligent 300A DC Load Distribution Panel with Remote Management of 50-Amp Load Outputs



Overview

The ICT300DB-12IRC DC Distribution Panel provides a dual feed, common ground 2RU solution for -48 volt DC applications requiring remote monitoring and power control of up to 12 individual loads. Each bus is rated at 150 Amps and provides six outputs rated at 50 Amps each. The integrated TCP/IP controller and web server provides a secure, easy to use graphical user interface for remote management and power control of system and individual outputs. SNMPv3 is supported for use with Network Management Systems. Firmware can be updated remotely over Ethernet.

Alarms can be sent to multiple email accounts, and each output has definable load-shed settings. The network watchdog feature will ping up to 12 pre-determined I.P. addresses, such as a router, and power-cycle the device if no response is received.

The ENERGY MANAGER SERIES allows each connected load to be remotely 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 a costly site visit.

Front access to load breakers simplifies installation and changes in enclosed racks or confined spaces. Convection cooling provides enhanced reliability.

Features

- 2RU, 19 inch design
- Convection cooled
- -48 VDC (nominal) operating voltage
- 300A system rating / 150A per bus
- 12 outputs (6/bus) rated at 50A each with remote ON/OFF control
- TCP/IP remote management and power control of individual outputs using secure web browser or SNMPv3
- Monitoring and alarm reporting of each output
- Each output has adjustable load-shed settings
- Network ping detection circuitry
- Adjustable power-on sequencing
- Data logging
- 2-year warranty

Applications

- Radio Access Networks / 5G
- DAS
- Fixed Wireless Broadband
- Remote Sites
- Fiber Networks
- Cable Headend
- Data Centers

INTELLIGENT POWER

Power Specifications

Operating Voltage Range	-30 to -60VDC
System Current Rating	300 Amps
Bus Current Rating	150 Amps each
Number of Outputs per Bus	6
Max. Output Breaker Rating	63A
Max. Load Output Rating	50 Amps per output
Electro-mechanical Output Relay Logic	Normally open

Environment

Operating Temperature Range	-30°C to +60°C
Output Derating	2% / °C (above 50°C)
Storage Temperature	-40°C to +70°C
Storage Humidity	30-90% RH
Cooling	Convection

Mechanical

Form Factor	2RU - 19 Inch rack mount
Dimensions L x W x H	9.4 x 19.0 x 3.5 in 236 x 483 x 90 mm
Weight (lbs/kg)	17.0 lbs / 7.7 kg
Input Connectors	Bus bars with dual 5/8" holes (rear access)
Output Connectors	Integrated into breakers (front access)

Design Standards

CSA/CSA US 62368-1, CE, RoHS

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	HTTP, HTTPS, SMTP, DNS, TCP, UDP, ICMP, DHCP, ARP, SNMPv1/v2c/v3, IPv4 *(IPv6 future release)*
SNMP Ports	UDP Port 161, SNMP Traps: UDP Port 162
Form C	NO/NC/C
Firmware Updates	Remote over Ethernet connection
Network Security	Password protection, HTTPS encryption, TLS 1.2
Load 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 12 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, low DC voltage triggered

Configurable Alarms

- Channel over current threshold
- Channel over/under current
- Bus over current
- Automatic load shedding
- Bus over/under voltage threshold

Ordering Information

Model Number	Description
ICT300DB-12IRC	Intelligent 300-amp, 12 output, Dual Feed Panel
ICT-CMA(1)	Cable management assembly (front or rear mounted)

Supported Breakers (1)

Type	Model	Wire Gauge Supported
Miniature Circuit Breaker; 63A	ICT-MCB63	18 AWG to 6 AWG
Miniature Circuit Breaker; 50A	ICT-MCB50	18 AWG to 6 AWG
Miniature Circuit Breaker; 40A	ICT-MCB40	18 AWG to 6 AWG
Miniature Circuit Breaker; 32A	ICT-MCB32	18 AWG to 6 AWG
Miniature Circuit Breaker; 20A	ICT-MCB20	18 AWG to 6 AWG

(1) Option, orderable separately

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