

# **DISTRIBUTION SERIES 3**

Dual Bus DC Load Distribution Panels

The ICT DISTRIBUTION SERIES 3 provides independent dual bus capability for redundant systems or mixed-voltage sites. Each bus is rated at 100A peak and provides six fuse or breaker protected outputs. Standard models are available for unmanaged applications, while Intelligent models include ICT's industry leading TCP/IP remote management and power control features.



ICT200DF-12IRC Intelligent Dual Bus Fuse Panel

## **Common Features**

- > 200A peak system current rating / 100A per bus
- Six outputs per bus
- Independent Form C alarm contacts for each bus
- Choice of fuse or breaker protected models
- 80 volt rated FKS ATO style fuses or high-quality, reliable hydraulic/magnetic breakers support 12, 24 and 48VDC
- Mixed voltages and polarities can be supported in one panel (provided grounds are common)
- -30 to +60C operating temperature range
- Front panel LED indicators for fuse status (fuse models)
- 2 year warranty

## **Intelligent Model Features**

- TCP/IP remote management and power control of system and individual outputs
- > On-board web server means no software to maintain
- Extremely easy to use Graphical User Interface
- Remote firmware update capability
- HTTPS, SMTP, SNMP protocols supported
- Monitoring and alarm reporting of each output for pinpointing of issues with connected loads
- Alarms can be sent to multiple email accounts
- > Each output has adjustable load-shed settings
- Network Watchdog feature will ping a pre-determined I.P. address and power-cycle connected device if not answered
- Five digital inputs for site monitoring sensors
- Data logging
- Password protection



## Lower Cost of Ownership and Site Maintenance

All models come with a 2 year warranty. Intelligent models are I.P. enabled for remote monitoring and remote shutdown or power cycling of individual outputs, potentially saving unnecessary service call-outs. Intelligent models also come with five digital input contacts for site monitoring sensors such as door, smoke, and water detection. Each input can be custom labeled to provide descriptive email alerts. All Distribution Series 3 models feature independent Form C outputs to monitor and report alarm conditions for each bus.

## **Remote TCP/IP Monitoring**

The Intelligent models are TCP/IP enabled, and utilize a built-in Ethernet connector with integrated web server to allow users to remotely monitor load conditions at the panel. System voltage and current, as well as the current reading of each output, can be monitored. This can provide an indication of a problem with the system power, or with individually connected devices such as a radio, repeater, or RF amplifier. Text or email alerts will be sent when an alarm is triggered. Up to 30 days of data logging is provided.

## **Remote TCP/IP Power Control**

Intelligent models allow the individual DC outputs to be turned on and off remotely using the TCP/IP connection. This allows connected devices to be power-cycled or shut down, potentially averting the need for an on-site service visit. The Network Watchdog feature pings a designated I.P. address and will restart an assigned output automatically, allowing devices such as routers to be power-cycled without risk of losing communications to the site. Load shedding is provided with user definable settings for each output, allowing non-essential loads to be automatically shut down in order to prolong power to priority loads.

## **TECHNICAL SPECIFICATIONS**

POWER SPECIFICATIONS	ICT200DF-12 Standard Dual Bus Fuse Panel	ICT200DB-12 Standard Dual Bus Breaker Panel	ICT200DF-12IRC Intelligent Dual Bus Fuse Panel With TCP/IP	ICT200DB-12IRC Intelliigent Dual Bus Breaker Panel With TCP/IP		
Application Voltage (pos or neg gnd)	12, 24, 48VDC					
System Current Rating (peak/cont)	200A/160A			*		
Bus Current Rating (peak/cont)	100A/80A					
Number of Outputs per bus	6 —					
Operating Voltage Range	10-60VDC			>		
Number of ATO Fused DC Outputs	12		12			
ATO Max Fuse Rating (12,24V)	25A <sup>(1)(2)</sup>		25A <sup>(1)(2)</sup>			
ATO Max Fuse Rating (48V)	25A <sup>(1)(2)</sup>		15A <sup>(1)(2)</sup>			
Number of Breaker Outputs		12		12		
Max Breaker Ratings (12,24V)		30A <sup>(1)(3)</sup>		30A <sup>(1)(3)</sup>		
Max Breaker Ratings (48V)		30A <sup>(1)(3)</sup>		15A <sup>(1)(3)</sup>		

#### MECHANICAL

Form Factor	1RU - 19 Inch rack mount with handles
Dimensions (inches) L x W x H	9.29 x 19.0 x 1.72
Weight (lbs/kg)	7.0 lbs / 3.2 kg
Connectors	M8 DC input stud connectors, 10-22AWG cage clamp output terminal blocks

#### **ENVIRONMENT**

|--|--|

#### **COMMUNICATIONS & CONTROL**

Ethernet			TCP/IP built-in web server and graphical user interfact 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 protected, HTTPS encryption, TLS 1.0		
12 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 los		
Power-up Delay Sequencing			User selectable 0 to 60 second delay between outputs		
Auto Load Shedding			Each output user definable, manual or auto restart		
Remote Alarms Independent Form C alarm contacts (C/NO/NC)					

(1) Please follow all recommendations of the manufacturer. Fuses, breakers and wiring should be continuously operated at no more than 80% of their current rating.
(2) Ships from factory with 12 - 15A FKS ATO 80VDC rated fuses installed.
(3) Hydraulic/magnetic breakers not included, must be ordered separately.

ACCESSORIES		5 AMP			0	
			10 AMP	15 AMP	25 AMP	30 AMP
	Hydraulic/magnetic circuit breaker	ICT-CB5	ICT-CB10	ICT-CB15	ICT-CB25	ICT-CB30
	80 volt, 15 Amp ATO fuse			ICT-80VF15		
	Blanking plate for unused breaker positions	e for unused breaker positions ICT-BLP				
	ICT 23 to 19 inch, 1RU rack mount reducer kit	ICT-RA2319				



© Innovative Circuit Technology Ltd. The information contained herein is subject to change without notice. ICT shall not be liable for technical or editorial errors or omissions contained herein.