1500 and 700 Watt Hot Swappable DC Power Modules

1500 Watt
Power Module

700 Watt
Power Module

Description

ICT 1500 watt and 700 watt hot-swappable DC power modules are designed to provide high performance, reliability, and redundancy when used with ICT's Modular Power Series, MPS Ultra, Hybrid Power Series and Hybrid Ultra, DC power systems, which both offer remote Ethernet-based communications for monitoring and control; enhanced security and reliability features including SNMPv1/v2c/v3 and TLS 1.2; fan fail detect alarms; and advanced battery management features, including battery current and state of charge reporting, estimated run-time remaining, temperature compensated charging and periodic battery discharge testing.

Power Module Features

- 1500 watt modules (48 & 24VDC)
- 700 watt modules (48, 24 &12VDC)
- Hot swappable
- 90 to 96% efficiency
- -30 C to +60 C operating temperature range
- CSA, FCC, CE, RoHS

Applications

- Fixed Wireless Access
- Radio Access Networks
- FTTP/H PON GPON
- Distributed antenna systems (DAS)
- Security and surveillance
- Industrial DC power

ICT MODULAR POWER SERIES & HYBRID POWER SERIES

- 1RU, 19 inch rack mount system
- Up to 6kW maximum output power with 1500W Power Modules
- Ethernet monitoring and control with Intelligent Control Module
- Optional fully-managed load distribution module (up to 8 outputs)
- Optional battery management module with 150A low voltage disconnect with single or dual 100A battery disconnects
- Hybrid Power Series integrated DC converter provides 700 watts of 12 or 24 volts DC output

ICT MPS ULTRA & HYBRID ULTRA

- 2RU, 19 inch rack mount system
- Up to 12kW maximum output power with 1500W Power Modules
- Ethernet monitoring and control with Intelligent Control Module
- Optional fully-managed load distribution module (up to 12 outputs)
- Optional battery management module with 150A LVD with dual 100A battery disconnects
- Hybrid Ultra integrated DC converter provides 700 watts of 12 or 24 volts DC output

Electrical Specifications	700 Watt Power Module			1500 Watt Power Module	
	ICT700-48PM	ICT700-24PM	ICT700-12PM	ICT1500-48PM	ICT1500-24PM
AC input voltage (nominal)	120/240VAC			120/240VAC	
Input Voltage Range	100-300VAC (no derating)			90-300VAC (derate to 50% power at 90VAC)	
Input Current @ nom. input, full load	7A max			8A max	
Power Factor (typical)	0.99			0.99	
Frequency	50/60 Hz			50/60 Hz	
Output Voltage Adjustment	46.0 - 62.0VDC	23.0 - 31.0VDC	11.5 - 15.5VDC	46.0 - 62.0VDC	23.0 - 31.0VDC
Output Voltage (factory default)	+/- 55.0VDC	+/- 27.6VDC	+/- 13.8VDC	+/- 55.2VDC	+/- 27.6VDC
Maximum Output Current	12.5A	25A	50A	27A	54A
Efficiency (peak)	93%	91%	90%	95%	94%
Output ripple	<60mV rms			<60mV rms	<40mV rms
Line Regulation	+/- 0.1%			+/- 0.1%	
Load Regulation	1.7% max			1.7% max	

Environmental	
Operating Temperature Range	-30° to +60° C
Output Derating	2% / °C (above 50° C)
Storage Temperature	-45° to +85° C

Design Standards		
Safety	EN 62368-1	EN 62368-1
Emissions	FCC Part 15/B, EN61000-6-2, 6-3, 3-2, EN55032, CE (*)	FCC Part 15, EN61000-3-2,3-3 EN55032, CE
Environmental	RoHS	

*700W 12V models are designed to meet these standards

Mechanical		
Dimensions (H x W x L)	1.73 x 3.66 x 11.34 in. / 44 x 93 x 288mm	
Weight (lbs/kg)	2.3 lbs / 1.04 kg	3.2 lbs / 1.45 kg

Other	
Protection Features	Over-temperature, over-current shutdown, input and output over-voltage, current limiting, Oring mosfet, fan fail detect with remote alarm
Warranty	2 years

Ordering Information

Description	48VDC Output	24VDC Output	12VDC Output
700W High Efficiency Hot Swappable Power Module	ICT700-48PM	ICT700-24PM	ICT700-12PM
1500W High Efficiency Hot Swappable Power Module	ICT1500-48PM	ICT1500-24PM	N/A

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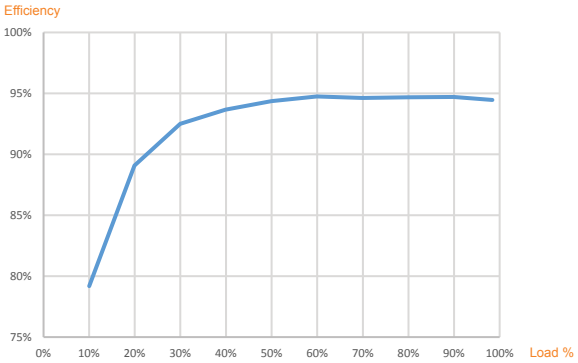

Fig. 1: 48VDC Power Module Efficiency

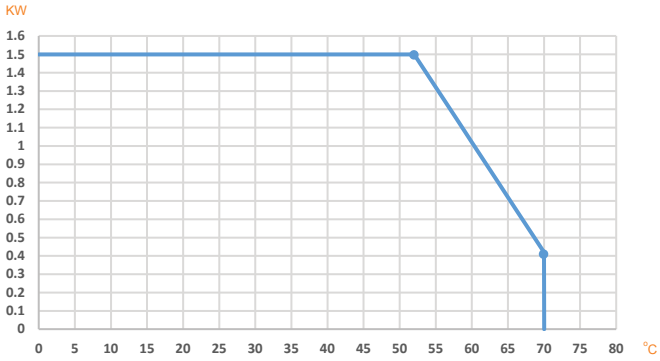

Fig. 2: Output Power vs. Temperature (C)

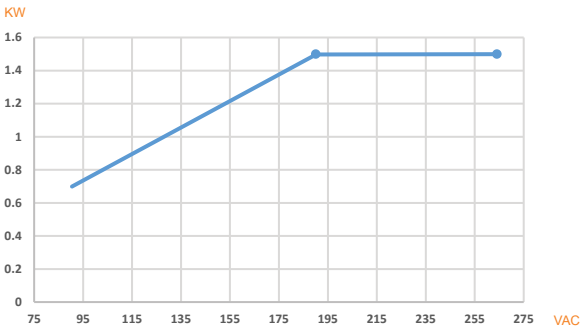

Fig. 3: Output Power vs. AC Input Voltage

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