

100A Load Module - E2010 Series

- REMOTE SENSE FOR ACCURATE VOLTAGE MEASUREMENTS
- CAN BUS AND CANOPEN PROTOCOL COMPATIBLE
- OPTIMISED FOR LOW VOLTAGE OPERATION

The 200-Watt DC Load is a variable electronic unit which is capable of sinking up to 100 amps at low voltages. This is available as an RE2010 module which is for a 6U high rack or as a 1U standalone Ethernet Instrument.

Designed for use in an E2010 system, the 200W Load is 261mm(6U high, approximately 390mm deep and fits into a 19-inch rack. Each Load possesses local intelligence in the form of a microcontroller This enables more efficient operation of constant voltage mode.



RE2010
100 Amp DC Load
722-0007

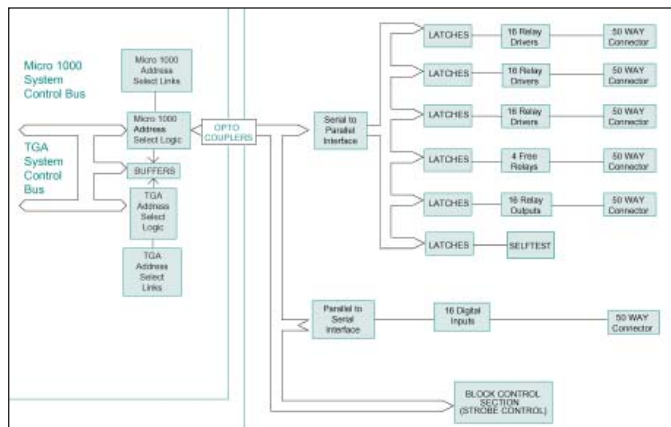
FEATURES

- Programmable slew rate performance
- Analog to digital converter for measurement of voltage and current to 15-bit resolution
- 1kV isolation
- Parallelable
- 0.8V operation at 100A

Controller Module

In an Intepro 9000 System, the Loads are controlled via a Controller Module (20mm /4HP wide) that is used to communicate with the host PC over an IEEE link.

The Controller Module relays commands and information over the internal CAN bus to the Master Loads. Each Load in a rack system can be addressed individually, as each back plane PCB slot has a unique address.



System Load Block Diagram



E2010
100 Amp DC Load
721-0007

The sense voltage from each Load can be daisy chained via RJ45 connectors and connected to a high speed Measurement Module which performs transient, peak, counting, timing, ripple and noise, DC, and AC tests on the DUT.

Constant I Mode		
Range	Resolution	Accuracy
0-10A	2.5mA	±0.05%SET±10mA
0-100A	25mA	±0.05%SET±50mA
Constant V Mode		
Range	Resolution	Accuracy
0.8-2V	0.5mV	±15mV
0.8-7.5V	2mV	±20mV
0.8-20V	5mV	±40mV
0.8-30V	20mV	±120mV

Technical Specifications

POWER	20W	200W	Operating Voltage below 0.8V	0.4V@50A/0.2V@25A
CURRENT	0-10A	0-100A	Min Voltage on Full Load	0.8V@100A
VOLTAGE	0.8-30V	0.8-30V	Module Power Consumption	12V@0.4A
TEMP. COEFFICIENT	Max 100PPM/°C			
CONSTANT R MODE	Range	Resolution	Accuracy	Temp Coefficient
0-2V INPUT RANGE	125S-50S/0R008-0R02	47.5mS	±1% SET ±250mA	200PPM/°C
0-7.5V INPUT RANGE	50S-7.52S/0R02-0R133	12.5mS	±1% SET ±250mA	200PPM/°C
0-20V INPUT RANGE	7.52S-2S/0R133-0R5	4.75mS	±1% SET ±250mA	200PPM/°C
0-30V INPUT RANGE	2S-0.5mS/0.5R-2K	1.25mS	±1% SET ±300mA	200PPM/°C
MEASUREMENT	Range	Resolution	Accuracy	Output
VOLTAGE READBACK	0-2V	15bit (62.5µV)	±0.05% ACT± 5mV	N/A
	0-7.5V	15bit (0.23mV)	±0.05% ACT ±0.1% FS	N/A
	0-20V	15bit (0.625mV)	±0.05% ACT ±0.1% FS	N/A
	0-30V	15bit (2.3mV)	±0.05% ACT ±0.1% FS	N/A
CURRENT READBACK	0-10A/0-100A	0.313mA/3.13mA	±0.05% ACT ±0.05%FS	N/A
POWER READBACK	0-20W/0-200W	0.25mW / 5mW	±0.5% FS	N/A
CURRENT MONITOR OUTPUT ISOLATED	0-10A/0-100A	N/A	±0.5% FS	N/A
SLEW RATE	16mA/µs ~ 4A/µs	16mA/ms	±10% SET ±10% FS	
EXTERNAL CONTROL	0-5V input gives 0-100A output			
OPERATING TEMP.	5°C to 40°C			
DIMENSIONS				
FAMILY SPEC. SAFETY	OTP: (Over Temperature Protection):	Non Latching disable		
	OVP: (Over Voltage Protection):	Greater than 35V crowbar		
	Isolation Voltage to GND:	Safety (1000V DC Peak)		
	Reverse Connection Protection Action:	Fuse protects against overcurrent - no action at nominal current		
ORDER INFORMATION	Part Number:	721-0007 (for a 6U Rack) 722-0007 (for a 1U Assembly)		
	Description:	100A/30V/200W Load		
SET: Refers to the set value		ACT: Refers to the set value		

INTEPRO
SYSTEMS

www.InteproATE.com

INTEPRO SYSTEMS EU/IRELAND

1530 S. Lyon Street
Santa Ana, CA 92705
USA
Tel: +1.714.679.9749
Fax: +1.714.953.3150

EU/IRELAND

Intepro Systems
Lonsdale Road,
National Technology Park
Limerick / Ireland
Tel: +353.61.33.22.33
Fax: +353.61.33.25.84

UNITED KINGDOM

Intepro Systems
1 Lakeside Business Park
Swan Lane, Sandhurst
Berkshire GU47 9DN / UK
Tel/Fax: +44.1252.875.600

CHINA

No.2405, Block D
Shahe Century Holiday Plaza
Nanshan District
Shenzhen, China 518053
Tel: +86 755 86398564
Fax: +86 755 86398567