

# 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

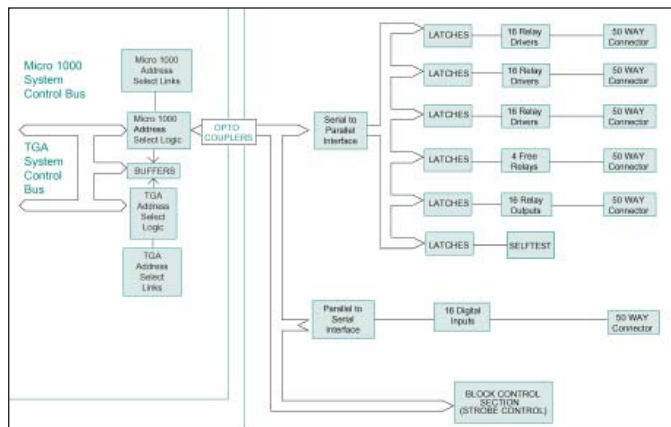
## FEATURES

- 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



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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

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

**INTEPRO**  
SYSTEMS

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