

## Intepro 9000 Series

### 40Amp/75Volt/200-Watt Load

- Remote sense in Master Loads for accurate voltage measurement of the DUT
- CAN bus and CANopen protocol compatible
- Arbitrary Waveform Generator allows multiple settings and waveforms to be programmed

The 200-Watt DC Load is a variable electronic unit which is capable of sinking up to 40 amps.

Designed for use in an Intepro 9000 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.

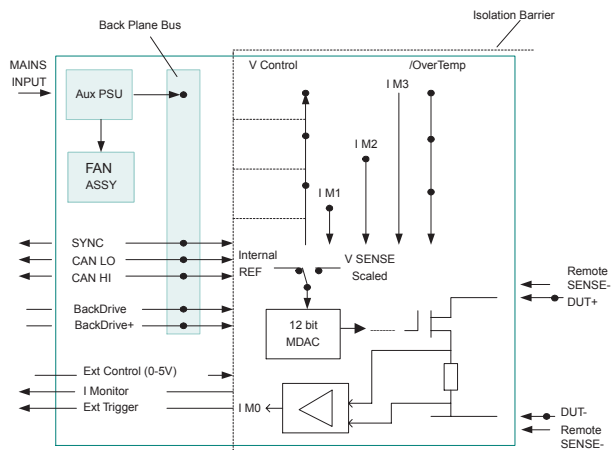


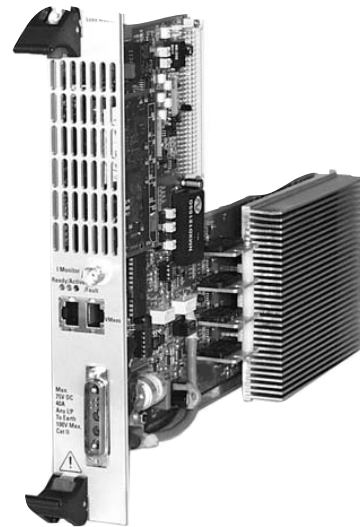
Figure 1: System Load Block Diagram

#### Features of the 200W DC Load include:

- High slew rate performance
- Surface-mount and throughhole technology
- Analog to digital converter for measurement of voltage and current to 15-bit resolution
- 1kV isolation

#### Controller Module

In an Intepro 9000 System, the Loads are controlled via a Controller Module (20mm /4HP wide) that is



200 Watt DC Load

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.

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
0-4A	1mA	±0.05%SET±4mA
0-40A	10mA	±0.05%SET±20mA

#### Constant V Mode

Range	Resolution	Accuracy
1-2V	0.5mV	±15mV
1-7.5V	2mV	±20mV
1-20V	5mV	±40mV
1-75V	20mV	±120mV

#### Constant P Mode

Range	Resolution	Accuracy
1mW-20W	1mW	2% FS
10mW-200W	10mW	2% FS

## Technical Specifications

<b>Power</b>	20W	200W	<b>Operating Voltage below 1V</b>	0.5V@20A/0.25V@10A
<b>Current</b>	0-4A	0-40A	<b>Min Voltage on full Load</b>	1V@40A
<b>Voltage</b>	1-75V	1-75V	<b>Module Power Consumption</b>	12V@0.4A

	Range	Resolution	Accuracy
<b>Slew Rate</b>	16mA/μs ~ 4A/μs	16mA/ms	±10% SET ±10% FS

Constant R Mode	Range	Resolution	Accuracy	Temp Coefficient
<b>0-2V Input Range</b>	40S-20S / 0R025-0R05	19mS	±1% SET ±100mA	200PPM/°C
<b>0-7.5V Input Range</b>	20S-7.52S / 0R05-0R133	5mS	±1% SET ±100mA	200PPM/°C
<b>0-20V Input Range</b>	7.52S-2S / 0R133-0R5	1.9mS	±1% SET ±100mA	200PPM/°C
<b>0-75V Input Range</b>	2S-0.5mS / 0.5R-2K	0.5mS	±1% SET ±120mA	200PPM/°C

Measurement	Range	Resolution	Accuracy	Output
<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
	0-75V	15bit (2.3mV)	±0.05% ACT ±0.1% FS	N/A
<b>Current readback</b>	0-4A / 0-40A	0.125mA / 1.25mA	±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>	0-4A / 0-40A	N/A	±1% FS	0-10V

<b>Temp Coefficient</b>	Max 100PPM/°C
<b>Operating Temp.</b>	5°C to 40°C
<b>Dimensions</b>	261mm (H) 40mm (W) 390mm (D)
<b>External Control</b>	0-5 V input gives 0-40A output
<b>Description</b>	40A/75V/200W
<b>Part Number</b>	714-0012

**Note:** For ambient temperatures over 35°C, derate power dissipation by 4W/°C

**OTP: (Over Temperature Protection):**  
Non Latching disable

**Reverse Connection Protection Action:**  
Fuse protects against overcurrent - no action at nominal current

**OVP: (Over Voltage Protection):**  
Greater than 80V crowbar

**Isolation Voltage to GND:**  
Safety (1000V DC Peak)

**SET:** Refers to the set value

**ACT:** Refers to the actual value being measured



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