



Current Load module
40A



Intepro 9000 Series

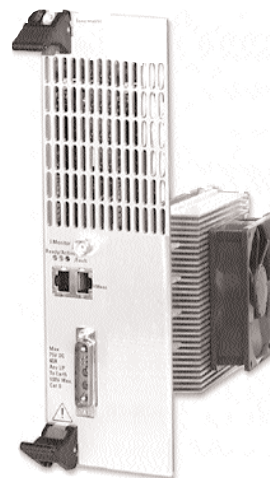
40Amp/75Volt/400-Watt Load

- Remote sense Loads for accurate voltage measurement of the DUT
- Loads can be operated in parallel for power applications up to 2000 watts
- Programmable slew rate
- Load synchronisation capabilities

The 400-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 400W 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 in constant voltage mode.



400 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 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.

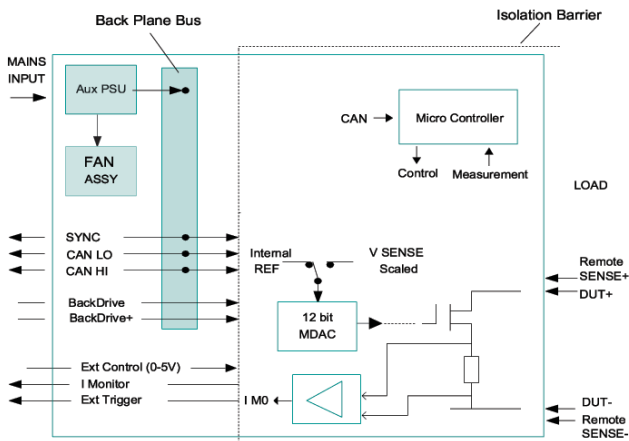


Figure 1: System Load Block Diagram

Features of the 400W DC Load include:

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

System Implementation

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

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
2mW-40W	2mW	2% FS
20mW-400W	20mW	2% FS

Technical Specifications

Power	40W	400W	Operating Voltage below 1V	0.5V@20A/0.25V@10A
Current	0-4A	0-40A	Min Voltage on full Load	1V@40A
Voltage	1-75V	1-75V	Module Power Consumption	12V@0.4A

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

Constant R Mode	Range	Resolution	Accuracy	Temp Coefficient
0-2V Input Range	40S-20S / 0R025-0R05	19mS	±1% SET ±100mA	200PPM/°C
0-7.5V Input Range	20S-7.52S / 0R05-0R133	5mS	±1% SET ±100mA	200PPM/°C
0-20V Input Range	7.52S-2S / 0R133-0R5	1.9mS	±1% SET ±100mA	200PPM/°C
0-75V Input Range	2S-0.5mS / 0.5R-2K	0.5mS	±1% SET ±120mA	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
	0-75V	15bit (2.3mV)	±0.05% ACT ±0.1% FS	N/A
Current readback	0-4A / 0-40A	0.125mA / 1.25mA	±0.05% ACT ±0.05%FS	N/A
Power readback	0-40W / 0-400W	0.5mW / 10mW	±0.5% FS	N/A
Current Monitor Output Isolated	0-4A / 0-40A	N/A	±1% FS	0-10V

Temp Coefficient	Max 100PPM/°C
Operating Temp.	5°C to 40°C
Dimensions	261mm (H) 80mm (W) 390mm (D)
External Control	0-5 V input gives 0-40A output
Description	LML9206 (40A/75V/400W)
Part Number	714-0030

Note: For ambient temperatures over 35°C, derate power dissipation by 8W/°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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