

TGA Octal Load

TGA 706-0029

- **Electronic loads on a card, 8 loads – 37Watts each**
- **Plug in module for TGA Architecture¹**
- **Constant current, and resistance modes**
- **Each Module independently isolated (optically)**
- **All loads share a common return path**
- **Backdrive and current measurement relays on-board**
- **High speed operation, less than 200uSec loop response**



The TGA Octal load module is ideal for providing modular load capability in any automatic test system. This module is specifically targeted at applications that require a large number of independent loads (e.g. Power Supply burn in).

Multiple modules can be configured in parallel to facilitate higher power outputs. Each TGA rack can accommodate up to 9 load modules (2.7Kwatts per rack) and multiple racks can be configured in a system. This makes the Intepro TGA load system one of the most cost effective and modular load facilities available on the market today.

Each load is fully programmable with twelve (12) bit resolution. The loads have an individual power rating of 37W but multiple loads can be configured in parallel to accommodate higher power requirements.

Each load can operate in constant current, and constant resistance mode. The load may also be modulated (pulsed) by an external signal source using the on board pulse relays.

Each load also has built in relays to facilitate easy O.V.P. (backdrive) testing in a power supply test system.

Each heat sink assembly on the load module is fitted with and over Temperature trip to eliminate the possibility of a thermal run away situation.

Calibration of the module is achieved via software routines and offset adjustments. There are no potentiometers on the module. The calibration constants for the module are stored in EEPROM on the module and therefore travel with each circuit. This can significantly reduce the time involved in calibrating a system with several loads installed.

The loop response time of the load is fixed at 200uSec. This provides a fast load operating level but is nevertheless slow enough to try to ensure that the loop will not be unstable (oscillate) in applications that might employ long lead lengths such as in the fixture wiring to the units in Burnin. The inductance associated with long wire lengths could cause the load to oscillate if the loop response was too fast.

The module is fully supported by the POWERSUITE and POWERSTAR software platforms supplied by Intepro.

The module is designed for simple plug in insertion into a TGA backplane system (low cost) or into any standard VXI backplane.

User connection to the module is via Positronic 24 way female connectors. This facilitates high power and signal connection in one easy to remove connector.

Due to the rather poor power dissipation capability of a VXI mainframe it is not practical to install the TGA dual load directly into a VXI rack. However, a Intepro VXI commander card may be installed in a VXI rack which can then be used to drive all external TGA racks from a VXI bus. The effectively make the TGA loads look like VXI message based instruments to the software but also make use of the high power dissipation capability of the TGA racks.

The TGA Octal is ideal for high density, low power, load requirements in an ATE system requiring multiple loads.

Technical Specifications	Range	Resolution	Accuracy
Constant Current	0A to 7.5A	2mA	+/- (0.25 % setting + 2mA)
Constant Resistance	0.6R to 2405R	0.04*Vin	+/- (0.25% setting + (0.002*vin +3mA))

Power Rating :	37 Watts max (per load)	Operating Temp :	0°C to 55°C
Response time :	200uSec	Storage temp :	0°C to 70°C
Measure accuracy :	0.25 % of actual current	Humidity :	10% to 85% Relative
Input voltage range :	1.5V to 100V DC (* Higher voltages available, contact factory)		

Ordering information

706-0029 TGA Octal Load Module

Options

¹ see separate data sheet on TGA backplane



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