

TGA Universal AC/DC Driver

TGA 709-0031

- Fully populated module can drive, a single three phase AC source and up to 4 OEM DC source or loads
- Plug in module for TGA Architecture¹
- Available as TGA or VXI message based module²
- Each driver circuit independently isolated (optically)
- AC source control from 30Hz to 2KHz
- Sag/Surge, Modulation, Distortion, Current Limit facilities
- Modular configuration, driver boards added to suit application

The TGA Universal driver is capable of driving multiple AC phases, DC sources and high power OEM loads. The module has a modular structure consisting of a mother board and plug on DC driver daughter cards and AC driver daughter cards.

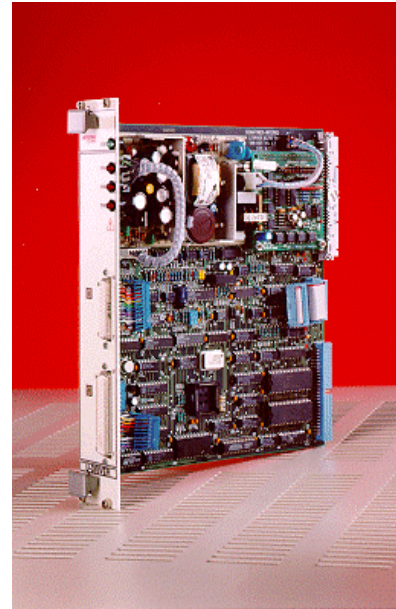
The mother board contains circuitry to drive one AC source phase and the control electronics to drive all of the plug on daughter cards.

Each DC daughter card can drive two DC sources or 2 OEM loads (4 isolated voltage outputs) Each AC daughter card can fully control one phase of an AC source. A maximum of two AC daughter boards and two DC daughter boards can be added to each mother board.

Each driver circuit has 12 bit resolution and is optically isolated from the other driver circuits on the module. Both the AC and DC driver circuits facilitate remote sense compensation to ensure accurate programming at the DUT input.

Each AC driver circuit has the following features;

- Freq. range (30Hz - 2Khz)
- Delayed Start / Stop
- Cycle Dropping
- Sag / Surge
- Amplitude Modulation
- Frequency Modulation
- High Frequency Distortion
- Remote sense compensation
- Programmable Current Limit
- 12 bit Resolution
- Event pulse output



Each DC driver circuit has the following features;

- 12 bit Voltage control output
- 12 bit Current control output
- Remote sense compensation
- Pulse input (for modulation)
- 50Khz signal bandwidth
- Output voltage selectable (0.5V to 12V)
- Diver outputs optically isolated

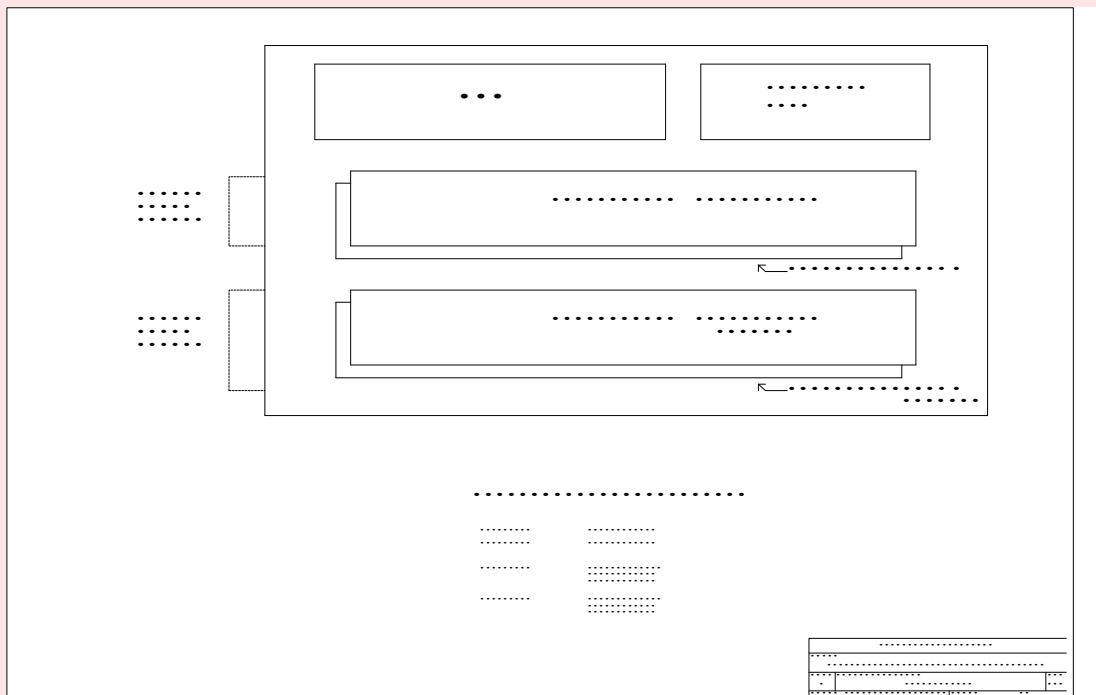
The module is fully supported by the POWERSUITE and POWERSTAR software platforms supplied by Intepro. The module is designed for simple plug in insertion into a TGA backplane system (low cost) or into any standard VXI backplane.

All 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 store in EEPROM on the module and therefore travel with each circuit. This can significantly reduce the time involved in calibrating a system.

The TGA universal driver is a very cost effective means of driving sources and loads in an ATE system.

Technical Specifications (AC Driver Board)

	Range	Resolution	Accuracy
Frequency	30Hz to 2KHz	0.1Hz	+/- 1%
Amplitude	0V to 8V RMS	2mV RMS	+/- 0.05V RMS
Sag/Surge	0 to Full Scale	2mV RMS	+/- 0.05%
Current limit	0 -> 15A and 0 -> 30A	0.25A 0.5A	8mA 16mA
Delay Start / Delay Stop :		Cycle Dropping :	
Step Size :	0.8 uSec	Min Width :	0.8 uSec
Min Delay :	0.8 uSec	Max Width:	52 mSec
Max Delay :	52 mSec	Resolution:	0.8 uSec
Amplitude Modulation :		Frequency Modulation :	
Output Scale	0 -> 8V RMS for 0-> 10V DC Input	Range :	30Hz to 2KHz
Linearity :	0.1% maximum		
HF Distortion :		NOTE :	
Vin Amp :	0 -> 10V Pk-Pk Signal	See TGA Universal DC Driver card for specification on	
Vin Freq :	0 -> 50KHz	DC Driver Daughter card	



Ordering information

706-0031 TGA Universal AC/DC Driver Module

Options

¹ see separate data sheet on TGA backplane

² Requires TGA/VXI adaptor module



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