

## TGA High Frequency Scanner

## TGA 706-0011

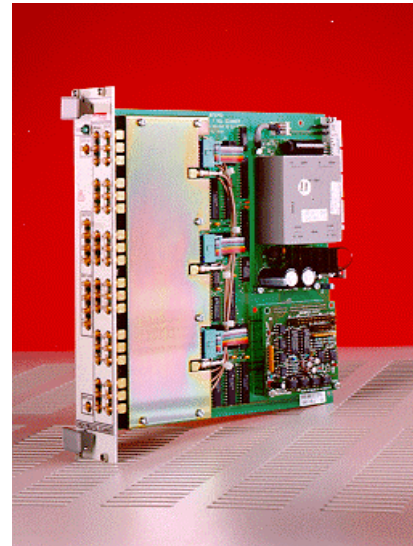
- **High Frequency Scanning up to 150mHz**
- **Plug in module for TGA Architecture<sup>1</sup>**
- **Available as TGA or VXI message based module<sup>2</sup>**
- **500V Switching**
- **On board selftest circuitry<sup>3</sup>**
- **Characterized for 50 Ohm characteristic impedance**
- **High Frequency Switching in a high power environment**

The TGA High Frequency scanner module is designed for reliable, high speed switching of sensitive test measurement signals. These modules are ideals for preserving a high frequency bandwidth in a high power, hostile environment.

The module is configured as a matrix with eighteen (18) differential input channels and four (4) differential channels. In special applications the relay control can be changed, via low level firmware commands, to control the module in a different mode. For example, as two separate 15 channels single ended co-axial switching systems.

The most common application of this module is for scanning high frequency differential signals from multiple points within a Device Under Test (DUT) through to a system measurement instrument such as an Oscilloscope or Ripple measurement module. The module is particularly useful in high power, hostile environments where high frequency bandwidth still has to be maintained. For example, measuring ripple and noise on a high voltage power supply output. The module can also be used as a high frequency multiplexer where a high frequency output (from a function generator for example) needs to be switched to several point on a DUT.

The module has been carefully designed to ensure that connections to non active channels are automatically disconnected to minimize the effect on the high frequency measurement being made. An additional input/output channel is available from each module thus facilitate daisy chaining of modules thus facilitating larger scanning system arrangements.



The relays are arranged on the boards in block of 6 relays. Logic decoders ensure that only one relay on any block can be closed at any time. The outputs of each block are independently fused to ensure that if a short circuit path is created in any measurement loop the relays and boards tracks will not be destroyed. This can be critical in high power, high voltage test situations such as Power Supply testing or EMC testing.

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

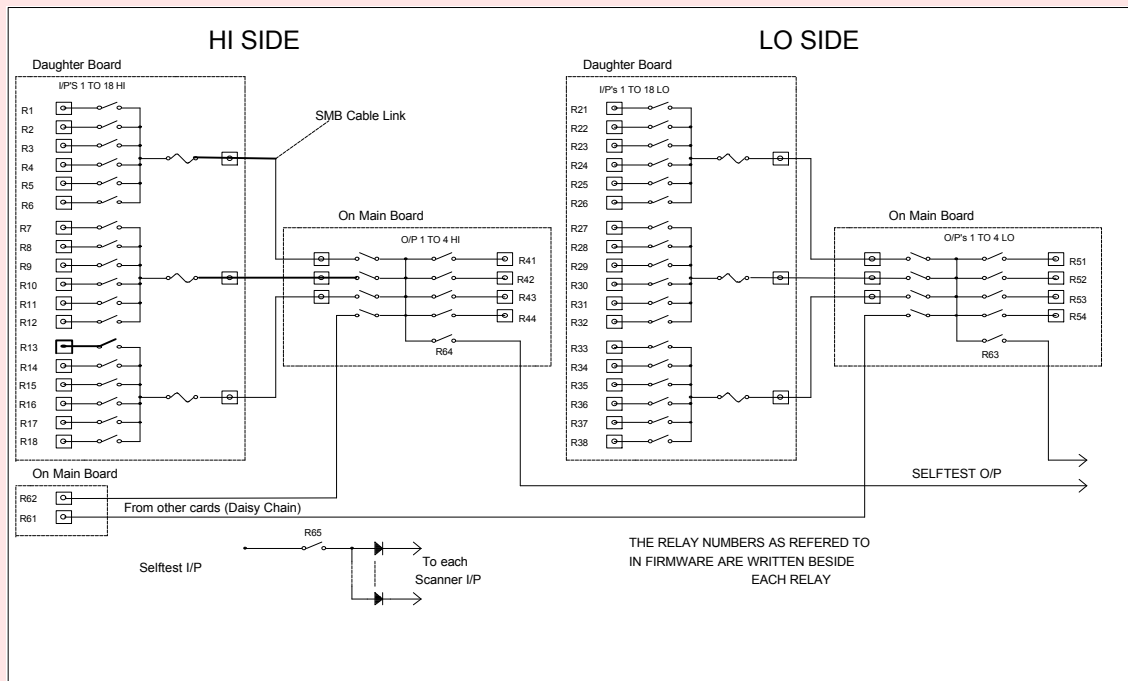
The module is designed for simple plug in insertion into a TGA backplane system ( low cost ) or into any standard VXI backplane.

The signal input interface to the DUT or to other modules, in a system environment, is via front panel SMB type connectors.

The high frequency scanning module is the most economical method of switching high frequency, high voltage, test point signals in a Intepro test system.

## Technical Specifications

<b>Relay Form :</b>	Double Pole Single Throw (DPST)	<b>Size :</b>	233mm x 220mm x 45mm TGA module (H x D x W) C Size, Double Slot VXI module
<b>Maximum Voltage :</b>	500V DC/AC (706-0011)	<b>User connections :</b>	48 SMB high frequency Connectors for 18 differential Inputs 4 differential Outputs 1 Daisy chain Input/Output
<b>Maximum current :</b>	1A @ 28V DC (28 Watts)	<b>Operating Temp :</b>	0°C to 55°C
<b>Contact resistance :</b>	50m $\Omega$ Max	<b>Storage Temp :</b>	0°C to 70°C
<b>Operate time :</b>	1.5mS Max	<b>Humidity :</b>	10% to 85% Relative
<b>Release time :</b>	1mS Max		



## Ordering information

706-0010 TGA Low voltage/High Frequency Scanner Module  
706-0011 TGA High voltage/High Frequency Scanner Module

## Options

<sup>1</sup> see separate data sheet on TGA backplane    <sup>2</sup> Requires TGA/VXI adapter module    <sup>3</sup> Selftest software available as a separate option



**Intepro Systems**  
1530 S. Lyon Street  
Santa Ana, CA 92705  
+1.714.679.9749  
+1.714.835.3441 (Fax)

**EU/Ireland**  
Intepro Systems  
Lonsdale Road  
National Technology Park  
Limerick / Ireland  
+353.61.33.22.33  
+353.61.33.25.84 (Fax)

**UK**  
Intepro Systems  
Ashville Way  
Molly Millar's Lane  
Wokingham / UK  
+44.118.977.0070  
+44.118.979.2969 (Fax)