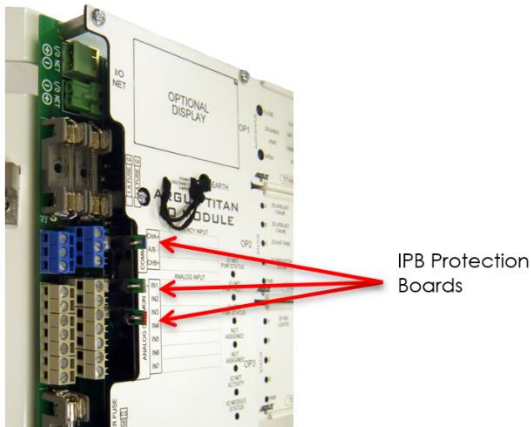


Titan Input Protection Boards

These small input protection devices plug onto the Titan I/O Backplane just behind the connection point for each input. Each one is color coded to indicate its application (see the application chart on the next page).



Applications



Input Protection Boards can be used for two purposes:

1. To provide protection against transient voltage conditions such as lightning strikes.
2. To provide specialized signal conversion for specific input sources (except for the TTN-IPB/TVS which is used only for overvoltage protection).

Alternatives

There are no alternatives to this product at this time.

Features

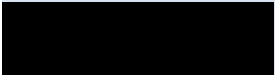

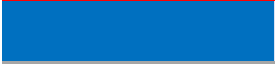


- Compatible with I/O module and Backbone Versions 1.3 and higher.
- Protects electronic equipment from overvoltage conditions.
- Easy to replace after a significant overvoltage event.
- Color coded for easy identification (see application chart on next page).
- Converts signals from a variety of input sources (see application chart on next page).
- Spare IPB's are provided with every I/O module to be used when additional inputs are added or when replacement is required after a significant overvoltage event.

Warning: Input Protection Boards (IPBs) cannot be used for any sensors/buffers/converters/transmitters not able to have a **capacitive load of 0.1µF** (for example, PHBF), or any digital and analog channel using **AC Impedance measurement configuration**.

Specifications

Connection Type	2-pin IDC Connector
Maximum Input Voltage	Plus 12V to Minus 0.6V
Maximum Surge Current	550A @ 8/20µS, 200A @ 8.3mS.
ESD Protection	16KV
Leakage	<1µA (tested value: 0.1~0.15nA)

Application Chart

Color Code	Part Number	Application
	TTN-IPB/TVS-3	Overvoltage protection only. Does not perform signal conversion and is to be used only for standard 0-5 volt or dry contact inputs. (Note: older versions are green or unpainted)
	TTN-IPB/4-20mA V1.1 TTN-IPB/4-20mA V1.2	Used with 4-20mA signal inputs V1.1 – Resistance: 249 Ohm resistor, +/-1% ¼ W accuracy V1.2 - Resistance: 249 Ohm resistor, +/-0.1% ¼ W accuracy
	TTN-IPB/OMNI	Used with Titan Omni Sensors Resistance: 44 Ohm resistor, +/-5% accuracy
	TTN-IPB/LI-190	Used with LI-COR LI-190 Quantum Light Sensors Resistance: 604 Ohm resistor, +/-1% accuracy
	TTN-IPB/LI-200	Used with LI-COR LI-200 Pyranometer Light Sensors Resistance: 147 Ohm resistor, +/-1% accuracy

Additional Information

For more information, please contact Argus.

