

DATASHEET

GPI-1501 GPI I/O Module



Space-saving, modular platform for advanced signal processing.

The GPI-1501 from Grass Valley® is a 2 RU Densité card which provides 20 dedicated general purpose interface (GPI) inputs plus eight terminals that can be individually configured, either as a GPI input or GPI output.

When paired with a GV Orbit® or iControl application server, the GPI-1501 provides alarm aggregation from older devices that do not offer Ethernet port connectivity. The application server can report alarm

status information to operators via GV Orbit, iControl or SNMP. It can also trigger external events, such as selecting an alternate source.

The card can also interface with automation systems via its GPI outputs for the control of legacy devices. Each incoming GPI is time stamped with incoming timecode, or using its own internal clock for accurate logging and report generation.

The GPI-1501 is also very useful in unmanned locations to report environmental anomalies when connected to GPI equipped sensors (intrusion, high humidity, temperature, smoke, etc). Multiple GPI-1501 cards can be ganged together to meet the requirements of larger installations.

Key Features

- Provides GPI alarm aggregation for older devices, bridging the gap to modern IP enabled control systems
- Interfaces seamlessly with most automation systems
- Alarm aggregation of virtually any GPI enabled device
- Scalable to address large systems
- Time stamped events for accurate logging and root cause analysis
- 20 dedicated GPI inputs and 8 individually configurable as GPI I/O per card
- SMPTE ST 12 LTC timecode input
- SNMP support (status reporting) through a GV Orbit or iControl application server
- Accurate internal clock with NTP protocol support

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Specifications

GPI In

Connector: DB-44

Number of input: 20 opto-isolated

Pull-up voltage: 2.3V

Source current: 2 mA when input shorted

Low level activation: 0.8V max Over voltage: 25V max Pulse duration: 8 ms min GPI Bidirectional

Connector: DB-44
Number of I/O: 8

Input Mode

Pull-up voltage: 2.3V

Source current: 2 mA when input shorted

Low level activation: 0.8V max

Over voltage: 25V max
Pulse duration: 8 ms min

Output Mode

Contact closure current: 50 mA max

Reverse voltage: -15V max Reverse current: -50 mA max V out low: 0.6V at 1.5 mA LTC Signal

Connector: Sharing input 20 of DB-44 GPI's

connector

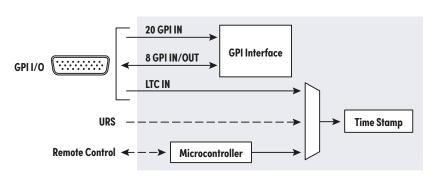
Signal type: Unbalanced as per SMPTE ST 12 date

and time as per SMPTE ST 309

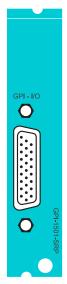
Electrical

Power: 1W





GPI-1501 Functional Block Diagram



GPI-1501-SRP

Ordering

Densité 2 frame Densité 3 frame Description
GPI-1501 GPI-1501-3RU GPI I/O module

GPI-1501-SRP GPI-1501-SRP-3RU Single rear connector panel

GPI-1501-RP-FR1 Rear panel for the GPI-1501 when use in the Densité 3+ FR1

Option Description

GPI-1501-TBA GPI I/O terminal block adapter
Remote control GV Orbit, iControl, iControl Solo

 $This \ product \ may \ be \ protected \ by \ one \ or \ more \ patents. For further information, \ please \ visit: \\ \textbf{www.grassvalley.com/patents}$

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