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Data Sheet

August 15, 2026

ABACO SYSTEMS / SBS / GREENSPRING

Abaco Systems / SBS / Greenspring IP-UNIDIG-I IndustryPack with 24 Differential I/O Lines and Interrupts

The Abaco Systems IP-UNIDIG-I is a single-wide Type I IndustryPack module providing 24 individually programmable differential I/O lines for industrial digital I/O applications. Each line operates independently as either input or output, with EIA-422 and EIA-485 compliance and an extended common mode range of +12 V to -7 V. The module features double buffering for both inputs and outputs - critical for simulation systems requiring simultaneous latching of multiple signals - and supports interrupt generation on any input line via five 24-bit registers. Output drivers employ open-collector transistor architecture with 1 kOhm pullup, capable of sinking up to 64 mA continuous load current. Input drivers accept ± 15 V / -5 V signals with 1.25 V logic threshold and 50 mV hysteresis. Socketed 100 Ohm termination resistors (factory default) across each differential pair allow user modification or

**MODEL****Abaco Systems /
SBS / Greenspring
IP-UNIDIG-I****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****IP-UNIDIG-I****LISTING**<https://aumictechlabs.com/products/ip-unidig-i-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

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Technical Specifications

Form Factor: Single-wide Type I IndustryPack (1.8 × 3.9 inches)

IndustryPack Interface: ANSI/VITA-4 compliant, 8 MHz, zero wait states

Digital Lines: 24 differential I/O, individually configurable

Input Specification: +15 V / -5 V range, 1.25 V threshold, 50 mV hysteresis

Output Specification: Open-collector, 64 mA continuous sink current

Differential Standards: EIA-422 and EIA-485

Common Mode Range: +12 V to -7 V

Double Buffering: Clock: Selectable 8 MHz internal or external source with programmable polarity

Power Consumption: +5 VDC, 510 mA typical (no load)

Operating Temperature: 0 to +70°C

Storage Temperature: -40 to +85°C

Humidity: 5 to 95% non-condensing

Weight: 0.06 kg

Key Features

- Interrupt capability on any input line via configurable 24-bit registers
- Master/slave synchronization mode; master redrives external clock via I/O line 23
- ESD protection via LineSafe technology (IP-UNIDIG-I-E variant)
- User-selectable termination resistor values

Typical Applications

- Multi-channel simulation and real-time control systems
- Industrial process monitoring with synchronized I/O latching
- Distributed IndustryPack clusters requiring clock-synchronous operation

Compatibility & Integration

IndustryPack carriers implementing ANSI/VITA-4 architecture support this module.

IPUNIDIGI Characteristics / Specifications

PARAMETER	VALUE
Model	IP-UNIDIG-I
Instrument Type	buffered TTL digital I/O IndustryPack
Card Format	single wide IndustryPack ANSI VITA 4
Channel Count	up to 24
Buffering	double buffered TTL I/O
Sink Current Class	64 mA
Input Voltage Class	+15 / -5 V per OEM summary
Interface Standard	ANSI VITA 4
Interface Speed Typical	8 MHz
Operating Temperature Commercial	0 to 70 C
Humidity	5 to 95 percent
Power Plus5 Typical No Load	510 mA
Interrupts	individually maskable edge polarity programmable
Isolation Voltage Class	100 V minimum subject to carrier
Module Width	single wide
Family	IP-UNIDIG unified digital series
Related Models	IP-UNIDIG-BUF IP-UNIDIG-I-D IP-UNIDIG-E-48
Carrier Interface	IndustryPack logic interface
Dimensions Typical Ip	1.800 by 3.900 by 0.340 inches maximum
Mezzanine Standard	ANSI VITA 4 IndustryPack
Logic Connector	IndustryPack logic interfaceIOConnector: IndustryPack 50-pin I/O class
Module Width Class	single wide unless noted
Typical Length	3.900 inches
Operating temperature	Commercial: 0 to 70 C

General Specifications & Supplementary Characteristics

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Typical Length	3.900 inches Notes From Greenspring SBS IP-UNIDIG-I reseller OEM summaries and family literature. Exact VIH VOL timing belong on the OEM datasheet for the installed revision.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.