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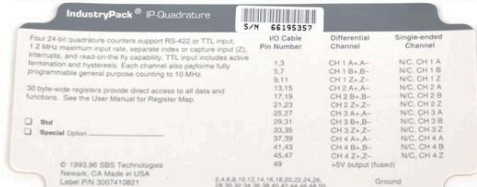
Data Sheet

August 15, 2026

ABACO SYSTEMS / SBS / GREENSPRING

Abaco Systems / SBS / Greenspring IP-Quadrature Four Channel Decoder IndustryPack

IndustryPack module with four-channel quadrature decoder for position and motion control applications.


MODEL

Abaco Systems /
SBS / Greenspring
IP-Quadrature

CALIBRATION

Available on
request

CONDITION

Used

STATUS

In stock

RFQ / SKU

IP-Quadrature

LISTING

<https://aumictechlabs.com/products/ip-quadrature-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Abaco Systems IP-Quadrature is a four-channel IndustryPack decoder module purpose-built for position and motion control applications requiring high-resolution incremental sensing. Each of the four independent channels delivers 24-bit resolution and operates as either a dedicated quadrature decoder or general-purpose counter, making it adaptable to diverse encoder and timing measurement tasks. Technical Specifications Channel Configuration Four independent channels 24-bit resolution per channel Count frequency: 0 to 10 MHz Dual-function operation: quadrature decoding and general-purpose counting Signal Input Differential or single-ended input modes RS-422 compatibility TTL/CMOS compatibility Programmable Control Mode selection Polarity configuration Interrupt generation Read-on-the-fly capability Key Features The module accommodates both differential and single-ended input topologies, allowing integration with

standard industrial sensor outputs. Programmable polarity and mode settings enable flexible encoder configuration without hardware modification. Interrupt support facilitates real-time event notification in motion control loops. Read-on-the-fly operation permits continuous count access without halting acquisition, critical for live position monitoring in closed-loop systems.

Typical Applications The IP-Quadrature targets incremental motion sensing across industrial automation and precision positioning. Shaft encoders ranging from 512 to 2048 counts per revolution integrate directly. Linear encoder applications benefit from resolution capabilities down to 0.005 inch per count, enabling sub-micron displacement measurement in machine tool feedback and robotic arm positioning.

Compatibility & Integration This IndustryPack module operates within IndustryPack carrier systems and compatible user-provided equipment. Proper carrier selection is essential - connection to incompatible hardware may cause serious damage. The standardized IndustryPack form factor ensures mechanical and electrical compatibility across qualified carrier platforms.

IPQUADRATURE Characteristics / Specifications

PARAMETER	VALUE
Model	IP-Quadrature
Instrument Type	four channel quadrature decoder IndustryPack
Card Format	single high IndustryPack 0.7 compatible
Channel Count	4
Inputs Per Channel	3 (XYcount andZcontrol)
Counter Resolution	24 bit
General Purpose Count Rate	DC to 10 MHz
Quadrature Count Rate	DC to 1.2 MHz (4.8 MHz count rate)
Input Levels	RS-422 differential and single-ended logic selectable
Rs422 Termination	120 ohm SIP standard removable
Ttl Termination	110 ohm to 2.85 V software selectable
Counter Device	LS7166
Counter Registers	Counter Preset Compare Output Latch all 24 bit
Read Mode	read on the fly supported
Clock Output	8 MHz RS-422
Power Dissipation Typical	770 mW at 5.0 V
Power Dissipation Maximum	1.04 W at 5.0 V
Dimensions	1.800 by 3.900 by 0.340 inches maximum
Operating Temperature	0 to 70 C
Humidity	5 to 95 percent non-condensing
Storage Temperature	-10 to +85 C
Wait States Data	one
Wait States Id Read	zero
Mezzanine Standard	ANSI VITA 4 IndustryPack

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	10 to +85 C
Operating temperature	0 to 70 C
Operating Temperature	0 to 70 C
Humidity	5 to 95 percent non-condensing
Wait States Data	one
Wait States Id Read	zero
Mezzanine Standard	ANSI VITA 4 IndustryPack Notes From SBS GreenSpring IP-Quadrature User Manual Rev 9 specifications table. Extended temperature and depopulated channel specials are factory options.

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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Notes

From SBS GreenSpring IP-Quadrature User Manual Rev 9 specifications table. Extended temperature and depopulated channel specials are factory options.

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.