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Data Sheet

August 13, 2026

EUROTHERM/INVENSYS

Invensys Eurotherm 6180A-U12

The Invensys Eurotherm 6180A-U12 is a paperless graphic recorder that offers secure data recording and versatile monitoring capabilities for industrial processes. It features a clear display, intuitive interface, and solid data storage, ensuring reliable performance in demanding environments. Ideal for applications requiring accurate and tamper-proof record-keeping.



MODEL

**Eurotherm/Invensys
6180A-U12**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6180A-U12

LISTING

<https://aumictechlabs.com/products/6180a-u12-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Invensys Eurotherm 6180A-U12 is a 12-channel paperless graphic recorder engineered for industrial process monitoring and secure data acquisition in regulated environments. Built around a 12.1" XGA color touchscreen, it delivers simultaneous measurement across configurable universal inputs with 125 ms total sample rate capability. The unit stores data in tamper-resistant binary format with internal Flash memory expandable to 96 MB, plus removable media and network archiving options. Ethernet TCP/IP, Modbus RTU/TCP, EtherNet/IP, and SFTP connectivity enable seamless integration into modern control and data systems. Security architecture includes 21 CFR Part 11 compliance features - audit trails, electronic signatures, role-based access control, and time synchronization via SNTP - making it suitable for pharmaceutical, aerospace, automotive, and food & beverage applications where data integrity and regulatory traceability are non-negotiable. Technical Specifications Display: 12.1" XGA color touchscreen

Input Channels: 12 universal, freely configurable Sample Rate: 125 ms total across all channels
Data Storage: Internal Flash memory up to 96 MB; removable Compact Flash or USB media supported; Ethernet archiving with infinite capacity Operating Temperature: 0°C to +50°C Storage Temperature: -20°C to 60°C Operating Humidity: 5% to 80% RH Storage Humidity: 5% to 90% RH
Enclosure Protection: Bezel and display IP65; sleeve IP20 Key Features Audit Trail with 21 CFR Part 11 support; optional full audit trail with password aging and electronic signatures Security Manager with unlimited user accounts and configurable permissions Store-and-forward data redundancy prevents loss during network interruptions Web server and remote viewing/configuration capability SFTP encrypted file transfer for secure backup and archiving SNTP time synchronization; unit can function as Unicast SNTP server ASCII text printer output for up to 10 simple reports USB Plug & Play connectivity Typical Applications Pharmaceutical manufacturing and quality assurance Aerospace component testing and validation Automotive production monitoring Food and beverage process control and compliance documentation Compatibility & Integration Modbus RTU (Serial) and Modbus TCP (Network) EtherNet/IP server Ethernet TCP/IP communication SFTP data transmission SNTP synchronization

Features & description

From manufacturer datasheet

Features

- 12.1 inch XGA resistive touch TFT (1024 × 768)
- Universal inputs (V, mV, mA with shunt, T/C, 2/3-wire RTD)
- 125 ms / 8 Hz parallel sample and trend update
- Tamper-resistant binary Flash plus CF/SD/USB archive
- Ethernet TCP/IP with FTP, DHCP, BOOTP, SNTP, Modbus, SMTP
- Auditor / 21 CFR Part 11 password, e-sign, and audit-trail options

6180AU12 Characteristics / Specifications

PARAMETER	VALUE
Model	6180A-U12
Manufacturer	Eurotherm (Invensys)
Instrument Type	Paperless graphic recorder
Series	6000 / 6100A / 6180A
Alias	6180A/U12; 6180A/U12/NONE; 6180A
Display	12.1 inch XGA (1024 × 768) color TFT, resistive analogue touch
Installed Universal Inputs	12 (U12 order code)
Max Universal Inputs	48 (6180A platform)
Inputs Per Board	6
Max Relays	36 (6180A)
Event Inputs	24 (6 per option card)
Groups	6 standard, 12 optional
Virtual Channels	36, 96, or 128
Alarms Per Channel	4
USB Ports	1 (6180A)
Recording Speed	8 Hz
Trend Speed	8 Hz
Sample Interval	125 ms
Internal Flash	32 MB or 96 MB class (up to 96 MB non-volatile)
ADC	>16 bit, 2nd order delta-sigma
Noise Rejection CM	>140 dB (48 to 62 Hz)
Noise Rejection SM	>60 dB
Max Common Mode	250 V continuous
Channel Isolation	300 V RMS or dc double insulation
Bezel	292 × 292 mm

PARAMETER	VALUE
Panel Cutout	281 × 281 mm (-0 / +1 mm)
Depth Behind Bezel	261 mm
Weight	7 kg max
Panel Mount	DIN 43700, +/-45 degrees
Bezel Protection	IP65 (IP66 cited on later web tables)
Sleeve Protection	IP20
Supply Standard	85 to 265 V ac, 47 to 63 Hz, or 110 to 370 V dc
Supply Low Voltage	20 to 42 V RMS 45 to 400 Hz, or 20 to 54 V dc
Power Max	60 VA (36 A inrush)
Holdup	>200 ms at 240 V ac full load
RTC Battery	BR2330, 1 year min unpowered, 3 year replacement
Ethernet	10/100BaseT IEEE 802.3, RJ45, CAT5 to 100 m
Ethernet Protocols	TCP/IP, FTP, DHCP, BOOTP, SNTP, Modbus, SMTP, ICMP
Serial Option Ports	2, EIA232 or EIA485, Modbus RTU master/slave
Operating Temperature	0 to 50 C
Storage Temperature	-20 to 60 C
Operating Humidity	5 to 80 percent RH
Storage Humidity	5 to 90 percent RH
Altitude	<2000 m
Voltage Range Example	-38 mV to +38 mV, 1.4 uV resolution
Pt100 Range	-200 to +850 C, IEC 751
Relay Boards Max	9 on 6180A (3 C/O or 4 N/C or 4 N/O per board)
Humidity	5 to 80 percent RH

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	20 to 60 C
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Operating Humidity	5 to 80 percent RH
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Voltage Range Example	-38 mV to +38 mV, 1.4 uV resolution
Pt100 Range	-200 to +850 C, IEC 751
Relay Boards Max	9 on 6180A (3 C/O or 4 N/C or 4 N/O per board) Notes Specs from Eurotherm 6100A/6180A specification sheet issue 2 (dt6000) and the 6100A/6180A data sheet. U12 is the 12-channel universal-input order code on a 48-channel-capable 6180A chassis. Confirm installed input/relay/comms cards and VH vs low-voltage supply on the unit.

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

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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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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30-day returns
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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.