

INDUSTRIAL AUTOMATION PRODUCT

1794-IE8

FLEX I/O 8 Point Analog Input Module

Converts eight single-ended current or voltage input channels into left-justified 16-bit FLEX I/O data for the adapter and controller.

IDENTITY	VERIFIED VALUE
Manufacturer	Allen-Bradley
System family	Allen-Bradley FLEX I/O
Part number	1794-IE8
Country	USA
HS code	8537101190

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Technical Specifications

Technical values below are limited to the named Allen-Bradley product record.

PARAMETER	VALUE
Catalog number	1794-IE8
Analog inputs	8 single-ended, nonisolated
Input voltage ranges	0...10 V; -10...+10 V
Input current ranges	0...20 mA; 4...20 mA
Resolution	12-bit unipolar; 11 bits plus sign bipolar
Voltage resolution	2.56 mV/count unipolar; 5.13 mV/count bipolar
Current resolution	5.13 μ A/count
Data format	Left-justified 16-bit two's complement
Conversion method	Successive approximation
Conversion rate	256 μ s for all channels
Voltage input impedance	100 k Ω nominal
Current input impedance	238 Ω nominal
FLEXBus current	15 mA at 5 V DC

PARAMETER	VALUE
External supply voltage	24 V DC nominal; 10.5...31.2 V DC
External supply current	60 mA at 24 V DC
Status indicator	1 red/green power/status LED
Enclosure type	Open style
Operating temperature	-20...+55 °C
Storage temperature	-40...+85 °C
Relative humidity	5...95%, noncondensing
Vibration	5 g at 10...500 Hz
Operating shock	30 g
Nonoperating shock	50 g
ESD immunity	6 kV contact; 8 kV air
Conducted RF immunity	10 Vrms, 150 kHz...80 MHz

VERIFIED PRODUCT RECORD

DATA GROUP	VERIFIED VALUE
Installed host / carrier	Compatible FLEX I/O adapter
Companion hardware	Approved FLEX I/O terminal base
Field connection	Current or voltage field transmitters
Primary system function	Accepts selectable voltage or current input ranges
Controlled acceptance duty	Eight-channel process transmitter acquisition

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System Role and Architecture

Converts eight single-ended current or voltage input channels into left-justified 16-bit FLEX I/O data for the adapter and controller.

FUNCTION 1

Accepts selectable voltage or current input ranges

FUNCTION 2

Converts all eight channels in 256 μs

FUNCTION 3

Presents input data in 16-bit two's-complement format

FUNCTION 4

Reports module power and status through a red/green indicator

Matched system components

- Compatible FLEX I/O adapter
- Approved FLEX I/O terminal base
- Current or voltage field transmitters
- Controller I/O configuration

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	Compatible FLEX I/O adapter
Companion hardware	Approved FLEX I/O terminal base
Field connection	Current or voltage field transmitters
Primary system function	Accepts selectable voltage or current input ranges
Controlled acceptance duty	Eight-channel process transmitter acquisition

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Applications and Engineering Context

Eight-channel process transmitter acquisition

Accepts selectable voltage or current input ranges

Remote pressure and flow monitoring

Converts all eight channels in 256 μs

Temperature-transmitter signal collection

Presents input data in 16-bit two's-complement format

FLEX I/O cabinet modernization

Reports module power and status through a red/green indicator

TECHNICAL NOTE

Mount 1794-IE8 on the terminal base specified in Rockwell Automation publication 1794-IN100, isolate field-loop energy before rewiring, preserve channel polarity and confirm each configured range with a controlled current or voltage source.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	1794-IE8 / 1794-IE8 recorded
Physical interface	Compatible FLEX I/O adapter
Companion check	Approved FLEX I/O terminal base
Functional proof	Accepts selectable voltage or current input ranges
Application test	Eight-channel process transmitter acquisition

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Engineering Precautions

1

Verify the complete 1794-IE8 marking and the assigned Allen-Bradley FLEX I/O position before work.

2

Isolate the applicable power and field energy before disconnecting 1794-IE8.

3

Record the installed conductor, connector and module position before replacement of 1794-IE8.

4

Use ESD controls and protect the keyed interfaces while handling 1794-IE8.

5

Confirm the companion hardware listed for 1794-IE8 matches the approved system drawing.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
1794-IE12	FLEX I/O 12-point analog input module	View 1794-IE12 page
1794-TB3	FLEX I/O 3-wire terminal base	View 1794-TB3 page
1794-OM8	FLEX I/O 8-point AC output module	View 1794-OM8 page
1794-AENT	FLEX I/O EtherNet/IP adapter	View 1794-AENT page
1794-IM8	FLEX I/O digital input module	View 1794-IM8 page
1794-IB16	FLEX I/O 16-point digital input module	View 1794-IB16 page
1756-ENBT/A	ControlLogix EtherNet/IP bridge module	View 1756-ENBT/A page
1756-IF16	ControlLogix analog input module	View 1756-IF16 page

MANUFACTURER SOURCE RECORD

FLEX I/O Analog Modules Technical Data

1794-TD016A-EN-E; 1794-IN100E-EN-P

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