

A-GAGE EZ-ARRAY Series

Product Specifications

Supply Voltage (Limit Values)	Emitter: 12 to 30V dc Receiver analog current models: 12 to 30V dc Receiver analog voltage models: 15 to 30V dc
Supply Power Requirements	Emitter/receiver pair: less than 9 W (exclusive of load)
Delay at Power-up	2 seconds
Emitter/Receiver Range	400 mm to 4 m
Field of View	Nominally $\pm 3^\circ$
Beam Spacing	5 mm
Light Source	Infrared LED
Minimum Object Detection Size	Straight scan, low-contrast: 5 mm Straight scan, high-excess-gain: 10 mm Note: See quick start guide p/n 126701 for other scan mode values; size is tested using a rod.
Sensor Positional Resolution	Straight scan: 5 mm Double-edge scan: 2.5 mm Single-edge scan: 2.5 mm
Teach Input (Receiver Gray Wire)	Low: 0 to 2 V High: 6 to 30 V or open (input impedance 22 K ohms)
Output Configuration	Two discrete output and two analog output Discrete outputs: Solid-State NPN (current sinking) or PNP (current sourcing) Analog output: 0 to 10V dc (voltage sourcing) or 4 to 20 mA (current sourcing)
Output Rating	Discrete output: 100 mA max. each output OFF-state leakage current: NPN:less than 200 uA @ 30V dc PNP:less than 10 uA @ 30V dc ON-state saturation voltage: NPN:less than 1.6V @ 100 mA PNP:less than 2.0V @ 100 mA Analog voltage output: Maximum current load:5 mA Analog current output: Maximum resistance load:(Vsupply-3) / 0.020
Serial Communication Interface	EIA-485 Modbus RTU (up to 15 nodes per communication ring) RTU binary format Baud rate: 9600, 19.2K or 38.4K, 8 Data Bits, 1 Stop Bit, and Even, Odd, or 2 Stop Bits and No Parity
Scan Time	Scan times depend on scan mode and sensor length. Straight scan times

	range from 2.8 to 26.5 milliseconds.
Status Indicators	<p>Emitter:Red status indicators Red ON steady:status OK Red flashing @ 1 hz:error</p> <p>Receiver: 7 Zone Indicators: Red:blocked channels within zone Green:all channels clear within zone</p> <p>3-digit 7-segment indicators:measurement mode / diagnostic information</p> <p>Sensor Status Bi-Color Indicator LED: Red:hardware error or marginal alignment Green:OK</p> <p>Modbus Activity Indicator LED:Yellow Modbus Error Indicator LED:Red</p>
System Configuration	6-position DIP switch: Used to set scanning type, measurement modes, analog slope and discrete output 2 function. Alternate software GUI interface provides additional options; see Section 1 and Section 5 of the full manual (p/n 130426).
Push Buttons (Receiver Interface)	Two momentary push buttons for alignment and gain level selection.
Connections	<p>Serial communication:The receiver uses a PVC-jacketed, 5-conductor 22-gauge quick-disconnect cable, 5.4 mm diameter. QD cables are ordered separately.</p> <p>Other Sensor connections:8-conductor quick-disconnect cables (one each for emitter and receiver). Length may not exceed 75 meters long. PVC-jacketed cables measure 5.8 mm diameter, have shield wire; 22-gauge conductors. QD cables are ordered separately.</p>
Construction	Aluminum housing with clear-anodized finish; acrylic lens cover
Environmental Rating	IEC IP65
Operating Conditions	<p>Temperature:–40° to +70° C Relative humidity:95% at 50° C (non-condensing)</p>