

**IQAN-XA2**

**IQAN System Products**



**General**

Weight	0.7 Kg
Operating temperature	-40 to +70 °C
Protection	outdoor use
Voltage supply	11- 32 VDC
Current consumption (idle)	75 mA (28 VDC) 95 mA (14 VDC)
Data interface	Parker ICP (IQAN CAN Protocol)

**Outputs**

Proportional outputs	6 double (max) <sup>1</sup>
Type current mode	current - closed-loop
PWM mode	voltage - open-loop
Signal range	100 - 2000 mA
Dither frequency	25 - 333 Hz
Resolution	1 mA
Digital outputs	12 (max) <sup>1</sup>
Type	high side switch
Total load (all outputs)	20 A

**Inputs**

Voltage inputs	8 (max) <sup>1</sup>
Signal range	0 - 5 VDC
Resolution	5 mV
Frequency inputs	4 (max) <sup>1</sup>
Signal range (speed mode)	2 - 30000 Hz
(position mode)	0 - 30000 Hz
Quadrature inputs	2 (max) <sup>1</sup>
Signal range (speed mode)	2 - 30000 Hz
(position mode)	0 - 30000 Hz
Digital inputs	20 (max) <sup>1</sup>
Signal high	4 VDC - V <sub>BAT</sub>
Signal low	0 - 1 VDC

1) The flexible inputs and outputs share the same physical pins. The user defines the channels/pins with IQANdesign.

**Application**

The IQAN-XA2 is the next generation of expansion module in the IQAN product group and is used with the IQANdesign platform. This unit is designed for high digital I/O count, weather resistance, and safety.

All IQAN expansion modules communicate with a master over a CAN bus. The XA2 module has new I/O flexibility that allows the user greater freedom in defining signals for measurement and control.

The IQAN-XA2 can control proportional valves using current mode (current closed-loop) or PWM mode (voltage open-loop) signals. The analog inputs accept 0-5V signals from input devices or sensors. These inputs can also be set up to accept 4 frequency or 2 directional frequency (quadrature) inputs. Many outputs may alternatively be used as digital inputs for switches. The XA2 also has a number of high power digital (on-off) outputs.

The aluminum housing is designed to be rugged, but light and has a sealed, automotive AMP/Tyco power timer connector. The XA2 has a membrane to prevent condensation inside the housing. This controller is designed for the outdoor environment.

The unit executes a self-test during start up and cyclic operation. An internal watch dog checks for software errors and will interrupt outputs if errors are detected. The IQAN-XA2 is made using selected components and conforms to strict international requirements.

Diagnostics: If an error is detected an LED on the top of the controller flashes a sequence to indicate the nature of the error.

**Description**

IQAN-XA2

**Ordering PN**

5010033

