

**IQAN-MC2**

**IQAN System Products**



**General**

Weight	0.7 Kg
Temperature range	-40 to +70 °C
Protection	outdoor use
Voltage supply	11- 32 VDC
Current consumption (idle)	160 mA (28 VDC) 200 mA (14 VDC)
Data interface	
Type	Parker ICP (IQAN CAN Protocol) J1939, Generic CAN
Communication port	
Type	USB 1.1 <sup>1</sup>

**Outputs**

Proportional outputs	8 double (max) <sup>2</sup>
Type current mode	current - closed-loop
PWM mode	voltage - open-loop
Signal range	100 - 2000 mA
Dither frequency	25 - 333 Hz
Resolution	0.1 mA
Digital outputs	24 (max) <sup>2</sup>
Type	high side switch
Total load (all outputs)	16 A

**Inputs**

Voltage inputs	13 (max) <sup>2</sup>
Signal range	0 - 5 VDC
Resolution	1.2 mV
Frequency inputs	5 (max) <sup>2</sup>
Signal range (speed mode)	2 - 20000 Hz
(position mode)	0 - 20000 Hz
Digital inputs	13 (max) <sup>2</sup>
Signal high	4 VDC - V <sub>BAT</sub>
Signal low	0 - 1 VDC

1) the USB driver circuit was updated on January 1, 2015.  
 2) The flexible inputs and outputs share the same physical pins. The user defines the channels/pins with IQANdesign.

**Application**

The IQAN-MC2 is a flexible master unit that works with a variety of expansion modules in the IQANdesign platform control system. This unit is suitable for use as either a Bus master or standalone control. The IQAN-MC2 has new I/O flexibility that allows the user greater freedom in defining signals for both measurement and control.

The different input types are voltage, on/off, pulse and frequency. The outputs are proportional and on/off. The unit also has two CAN interfaces for bus communication using IQAN CAN Protocol (ICP) and SAE J1939 or Generic CAN.

The MC2 is equipped with a Real Time Clock and can perform data logging functions.

The IQAN-MC2 can control proportional valves using current mode (current closed-loop) or PWM mode (voltage open-loop) signals. The analog inputs will accept 0-5V signals from input devices or sensors. The inputs can also be configured for 5 frequency inputs. Some outputs may alternatively be used as voltage inputs or digital inputs for switches. For communication and diagnostics the MC2 has a USB interface.

The aluminum housing is designed to be rugged, but light and has a sealed, automotive AMP/Tyco power timer connector. The IQAN-MC2 has a membrane to prevent condensation inside the housing. Additional protection allows the unit to be steam-cleaned. This controller is designed for the outdoor environment.

**Description**

**IQAN-MC2-M14**

**Phased-out part number**

**IQAN-MC2**

**Ordering PN**

**20077787<sup>3</sup>**

**20070899<sup>4</sup>**

3) This p/n is used after January 1, 2015 and requires software versions 2.61 and 3.14 or higher.  
 4) This p/n was used before January 1, 2015.

