

32-Channel Analog Input Module Quantum Automation Series

140 ACI 051 00sc
140 ACI 052 00sc

Selectable Current or Voltage
Selectable Current or Voltage with Time Stamp



The 140 ACI 05x 00sc provides Quantum Automation Series CPUs the capacity for large quantities of analog input points. The 140 ACI 05x 00sc reduces your system's total I/O cost when you require more than eight channels. The price per input point is lower than ever before, resulting in significant savings for any system.

The 140 ACI 051 00sc and 140 ACI 052 00sc are selectable for voltage or current inputs, with the latter version offering the time stamp option.

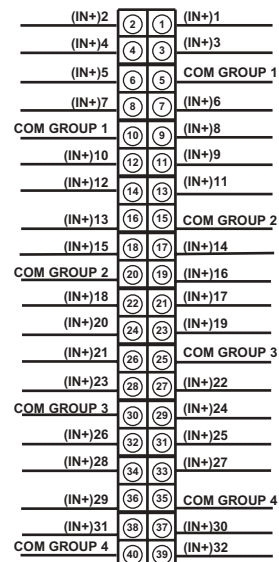
The module resides in a standard Quantum backplane and offers:

- Outstanding versatility with four isolated groups of eight inputs. Each group can be configured for any one of seven voltage or current ranges.
- Over voltage protection, over- and under-range detection and active band pass filtering.
- Precision through 16-bit resolution and .05 percent accuracy.
- Automatic conversion of analog signals into integer data.

This module is especially valuable in projects where large numbers of analog signals need to be measured efficiently and economically.

Designed for the process and data acquisition industries such as utility, water/wastewater, oil/gas, food/beverage and building automation industries, the 140 ACI 050 modules are the ideal solution for those who need to acquire signals from a larger number of analog sources within an individual process or throughout a facility.

Note: The field wiring terminal block (Modicon #140 XTS 002 00) or the 140 CFA040 00 40 pin Cablefast Terminal block must be ordered separately. The terminal block includes the removable door.



140 Axl 05x 00sc Wiring Diagram

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Specifications	
Number of Channels	32
Input Registers Required	9
Output Registers Required	1
Input Configuration	32 inputs configured in groups of 8
LEDs	35 - One each for Ready (Green), Active (Green), Fault (Red), 32 Channel (Green)
Voltage Range	±10VDC, 0 to 10VDC, 0 to 5VDC, 1 to 5VDC
Current Range	4 to 20mA, 0 to 20mA, ±20mA
Impedance, input	Voltage Mode: 10 Megohms, min. Current Mode: 350 ohms
Fault Detection	Over & under range status bits, for all current and voltage modes.
CMRR	90 dB
Power Requirements	630 mA @ 5 V maximum
Max Input Current	±50 mA continuous
Max Input Voltage	± 20VDC continuous
Agency Approvals	UL, CUL Class 1 Div II, CE, FCC Class A
Accuracy	Note: Accuracy is dependent on the filter frequency selection, range selection, data format and input noise.
Voltage Typ	±.03% of full scale typical @ 25°C.
Voltage Max	±.05% of full scale maximum @ 0 to 60°C.
Current Typ	.±05% of full scale typical @ 25°C
Current Max	±.10% of full scale maximum @ 0 to 60°C
Miscellaneous	
Display format	12 bit integer, 16 bit integer, 15 bit signed integer, 10000 count DVM
Engineering units	mV, mA
Resolution	10 bits to 22 bits (frequency dependent)
Input Filter	10Hz, 50Hz, 60Hz, 1KHz Digital Notch Filter, Programmable in groups of 8 inputs.
Channel Update Time	See Installation Guide for Channel Update Time chart vs Filter Selection
Single Channel	12 ms to 308 ms (frequency dependent)
Isolation	
Channel to Rack	500 VAC Continuous Optical & Magnetic
Channel to Channel	0 volts, non-isolated within a group
Group to Group	±15V
Time Stamp	
Data Format	Month, Day, Hour, Minute, Second, msec Sequence
Timer Resolution	±100 msec (frequency dependent)
Timer Drift	5 sec per day, reset on demand
Alarm Accuracy	Same as System Accuracy



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