

# I/O EXPANSION MODULE



CURTIS

## MODEL 1352 eXM



### DESCRIPTION

The Curtis Model 1352 eXM CANbus Hydraulic Input/Output Expansion Module can be added to any CANbus based control system utilizing the CANopen communication bus protocol. It provides a simple, flexible and cost effective method of controlling up to 6 proportional hydraulic valves, or can be used to connect additional digital and analog I/O to a CANbus system.

### APPLICATION

Any distributed or centralized vehicle control system using the CANopen protocol that requires control of hydraulic proportional valves or additional inputs and/or outputs. Typical applications include Materials Handling trucks, Aerial Lift Platforms, Airport Ground Support Equipment, Compact Construction Equipment and Sweeper-Scrubber floorcare machines.

### FEATURES

- 9 multi-purpose I/O pins in a compact, low cost, rugged module.
- 6 powerful high-frequency PWM outputs rated at 3 amps each.
- 6 digital inputs. Each output can also be used as an active high digital input.
- Analog inputs with 12 bit resolution.
- CANopen interface allows interconnection to a wide range of products, including the Curtis line of AC controllers and Curtis vehicle system controllers.
- Constant Current or Constant Voltage output modes provide accurate control.
- Built-in programmable dither amount & frequency allow precise hydraulic proportional valve positioning.
- Analog inputs can also be used as Virtual Digital Inputs with programmable On/Off thresholds and variable filters.
- Built-in coil flyback diodes reduce voltage spikes when driving inductive loads/coils.
- Sealed and positively latched I/O connector (14 pin AMPSeal)
- Externally viewable Status LEDs.
- Suitable for use on 12V internal combustion applications.

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## SPECIFICATIONS

### Robust Safety and Reliability

- Short circuit protection on all output drivers.
- Separate software and hardware watchdog circuits.
- Rugged sealed housing and connector meets IP65 environmental sealing standards for use in harsh environments.
- Operating ambient temperature range from -40 to + 50° C.
- 500VAC electrical isolation to case.

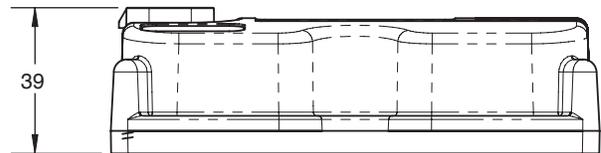
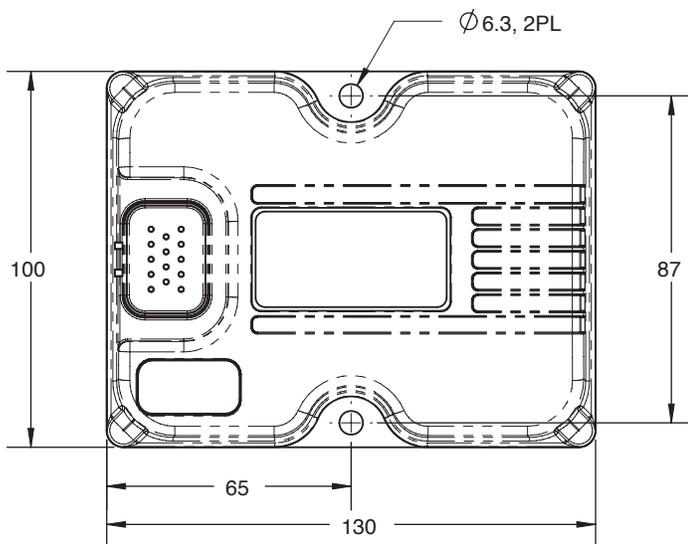
### Meets or complies with relevant US and International Regulations

- EN 50081 1-1-2
- EN 61000-6-2
- EN 12895
- EN 1175
- IP65 Rated Per IEC 529
- UL Listed

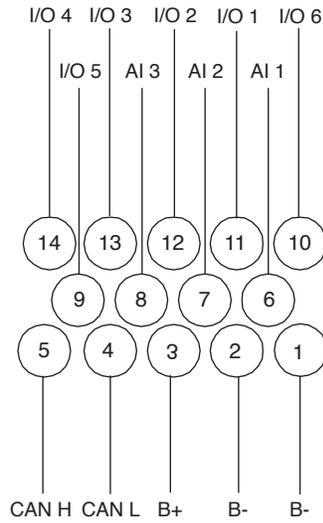
## MODEL CHART

Model	Voltage (V)
1352-4001	12-36V
1352-6001	36-80V

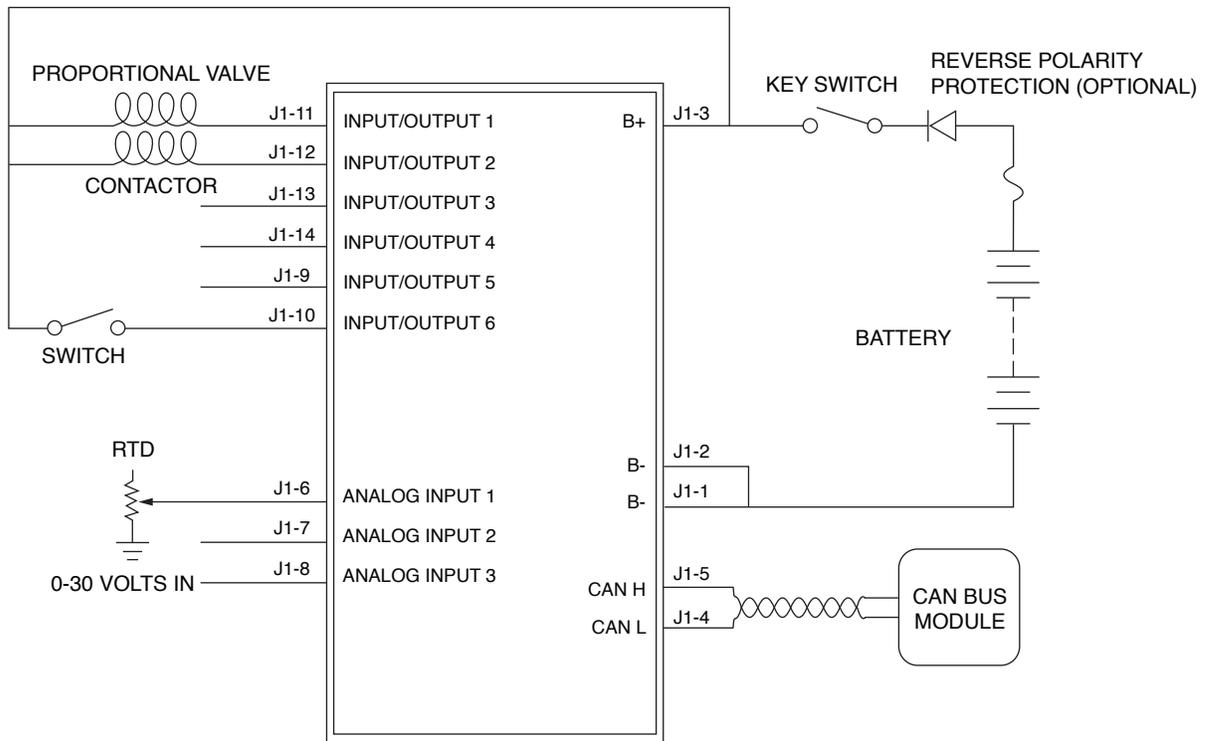
## DIMENSIONS mm



## CONNECTOR WIRING



## TYPICAL WIRING DIAGRAM



**WARRANTY** Two year limited warranty from time of delivery.

