



MX118-CAN-M30 Specifications	
CAN Protocol Version:	Ver 2.0B (Standard & extended message format)
Standard:	ISO11898 (High Speed Communication)
Communication Rate:	10kbps to 1Mbps, selectable time quanta and sample point
Byte Order:	Big endian / Little endian
Data Type:	Unsigned / Signed / Floating (32bit) / Double (64bit)
Number of Ports:	2; 1 CAN and 1 RS-232C serial for configuration
Number of Message IDs:	Selectable from 10, 20, or 30 Data value range - 30000 to 30000
Sample Interval:	10mS to 60S (when set for 10mS, MW100 system is limited to 10 channels maximum)
CAN bus Terminator:	120Ω

## HOW TO ORDER

Model Code	Description
MX118-CAN-M30	MW100 CAN bus interface module with MW CAN configuration software

### Required MW100 System Components for a CAN Data Logging System

1. MW100 main unit
2. MX150-x base plate (specify number of slots needed)
3. MX118-CAN-M30 CAN interface module (specify number needed)
4. Optional- MX series I/O modules (specify as needed for analog and digital I/O functions)



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Represented by:



**DAQMASTER**

**CAN**  
Interface Module for the MW100  
Data Acquisition System

Bulletin 04M10B01-02E-A

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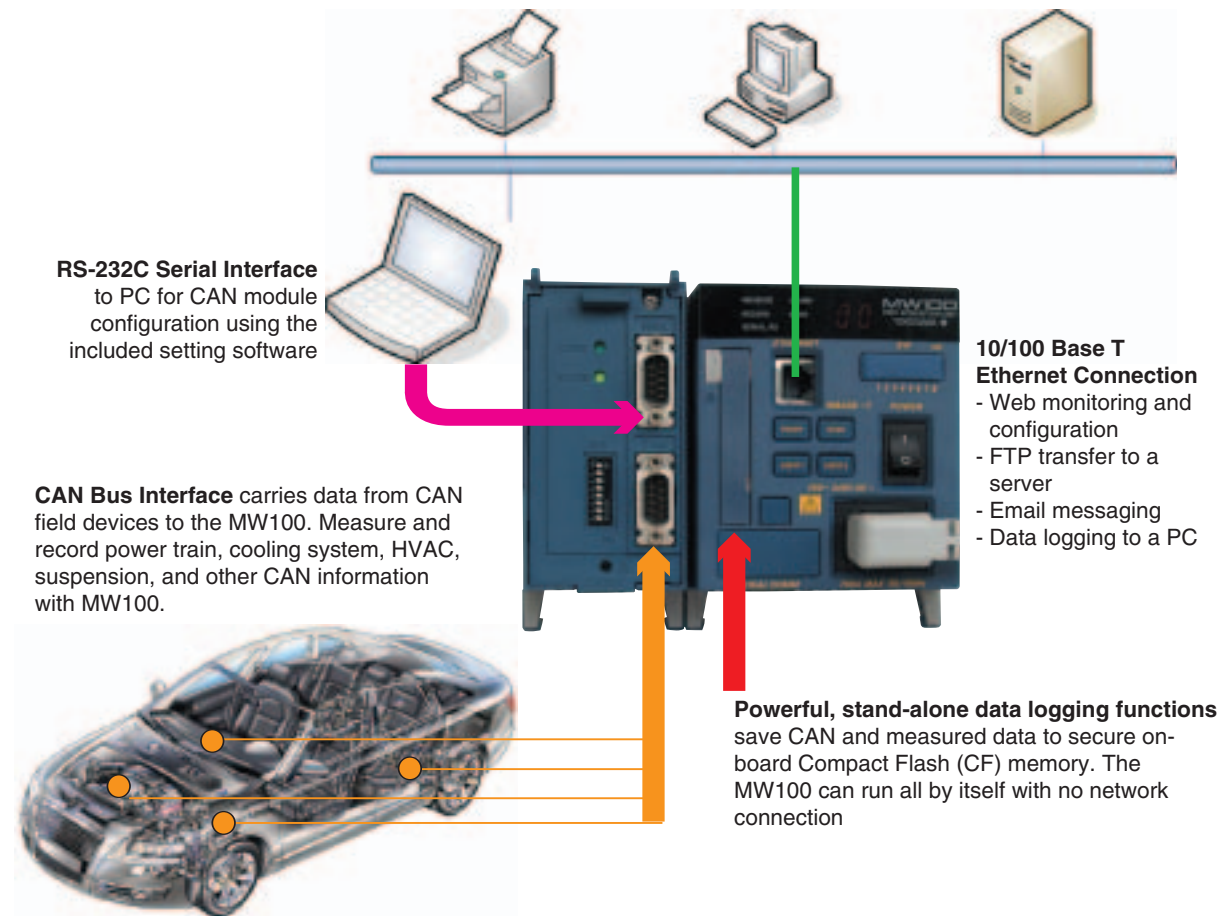
The MW100 data acquisition/data logging system can now accept up to 60 channels of data from two or more CAN bus connections.

Apply the full range of advanced MW100 capabilities to applications that require monitoring and recording of CAN bus data values. MW100 now becomes a flexible, compact, and portable recording system that can handle a wide range of applications in the industries that use CAN bus technology.

The CAN interface module can be combined with analog universal input modules on the same MW100 system so that temperature, pressure, strain, and other common measurements can be performed along side CAN bus measurements on the same vehicle or system under test and combined in the same report.

### MW100 system benefits include:

- Choice of I/O modules; customize your MW100 measurement system to include CAN and analog input data
- Multi-interval data logging to on-board Compact Flash (CF) memory
- Real-time monitoring and trending with common web browsers
- 12-28 VDC power for portable applications
- Wide operating temperature range of -20 to 50°C
- 10/100 base Ethernet interface with email messaging and automatic FTP transfer of archive files to a PC server
- Optional low cost data logging PC software
- OPC server and Lab View driver availability



The MX118-CAN-M30 interface module occupies one physical slot location on the MW100 base plate. There are two 9 pin D connectors on the front panel; the top one is an RS-232C serial port, which attaches to a PC. A software program is used to configure the module through this port. The bottom connector attaches the module to the CAN bus. An 8 position DIP switch sets baud rate, measurement mode and enables a bus terminator if needed. LED indicators show CAN bus activity and setting mode status.

The CAN interface module substitutes digital CAN channels (messages) for measured channel values on the MW100. The module can be set to read 10, 20, or 30 messages from the CAN bus, thus a single CAN interface module uses the same logical channel locations and base plate slot positions as the analog input module(s) it replaces. When set for 10 messages, one logical MW100 slot position is used; 20 messages uses two slot positions; and 30 uses three slot positions. The CAN module communications is single-direction, read only. Data from the MW100 cannot be written to the CAN bus.

If CAN data is to be read from more than one bus, one CAN module per bus is required. Up to 6 modules can be used, 10-30 messages each, not to exceed the overall system limit of 60 messages. Example: 6 modules, 10 messages each; 3 modules, 20 messages each or 2 modules, 30 messages each.

All MW100 measure channel attributes including engineering units, tag names, scaling, colors and alarms can be applied to CAN message data.

The CAN interface module can be combined with other MW100 I/O modules, offering great flexibility in how the data logging system can be configured. Analog sensor measurements can coexist with CAN inputs on the same system, alarm relays can be used, etc. as long as slot positions are available on the base plate. The table below shows slot and channel allocations and number of allowed modules.

Slot Width	Channels (messages)	Number of Allowed CAN Modules
1	10	6
2	20	3
3	30	2

## SCALED TO YOUR APPLICATION

- 1 slot base plate with MW100 main unit  
MX118 CAN module; 10-30 CAN channels
- 2 slot base plate with MW100 main unit  
1 MX110 analog input module; up to 10 analog inputs  
MX118 CAN module; 10-30 CAN channels
- 3 slot base plate with MW100 main unit  
2 MX110 analog input modules; up to 20 analog inputs  
MX118 CAN module; 10-30 CAN channels
- 4 slot base plate with MW100 main unit  
3 MX110 analog input modules; up to 30 analog inputs  
MX118 CAN module; 10-30 CAN channels
- 5 slot base plate with MW100 main unit  
4 MX110 analog input modules; up to 40 analog inputs  
MX118 CAN module; 10-20 CAN channels
- 6 slot base plate with MW100 main unit  
5 MX110 analog input modules; up to 50 analog inputs  
MX118 CAN module; 10 CAN channels

The CAN module can be installed with any combination of MX series I/O modules. One or more CAN modules can be combined with input modules to achieve systems of various input capacity.

The CAN module requires one open slot position for each 10 channel range that it uses. For example, when set for 30 channels, 3 slot positions are used by the module and cannot be used by other modules. For connection to more than one bus, use one CAN module per bus.