

PRESS RELEASE

May 20th, 2026 – Mississauga, ON, Canada

Axiomatic releases a rugged, fully isolated thermocouple module to deliver temperature data to engine control systems over the SAE J1939 network for power generator sets.

[AX185010](#) is an isolated 20 channel thermocouple (TC) scanner designed for thermocouple integrity in control systems of both stationary and portable industrial and power generator sets. [AX185010](#) includes full isolation between each input, the CAN line, and the power supply. The TC scanner provides engine temperature information such as exhaust, winding, and fluid temperatures to the SAE J1939 CAN bus network. The [AX185010](#) module features auto-baud-rate detection for the SAE J1939 CAN network and is configurable using the Axiomatic Electronic Assistant, P/N: [AX070506K](#).



[AX185010 — 20 Channel Thermocouple Scanner, Isolated, SAE J1939](#)

The Isolated Thermocouple Scanner monitors up to twenty 2-wire thermocouple inputs, independently programmable as TC types J, K, B, E, N, R, S, or T. The input channels can also be connected to junction-grounded thermocouples too. Temperature data is automatically sent over the CAN bus when power is applied. Integral diagnostics determine thermocouple integrity. [AX185010](#) operates from -40 to 85 °C (-40 to 185 °F) with 12 or 24 VDC nominal (9 to 60 VDC) power. This rugged, IP67-rated thermocouple scanner features TE Deutsch connectors and can be mounted directly in the power generator set.

For more details, please visit the [AX185010](#) webpage.

Axiomatic is developing a CANopen® version of this product, P/N: AX185011.

[AX185010](#) is the newest addition to Axiomatic's [Thermocouple \(TC\) Modules](#) line-up.

Below is a brief comparison of all currently available TC Modules.

Part Number	Inputs	Isolation	Communications
AX189000	1x TC input 2x signal inputs	The TC input and CAN line are isolated from the power supply and other inputs.	2x SAE J1939, ABR
AX189001	1x TC input 2x signal inputs	The TC input and CAN line are isolated from the power supply and other inputs.	2x CANopen®
AX030341	1x TC input 3x signal inputs 12x digital inputs	The TC input is fully isolated from the CAN line, the power supply, and other inputs.	1x CANopen®
AX188000	2x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x SAE J1939, 250 kbps
AX188000-01	2x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x SAE J1939, 500 kbps
AX188000-02	2x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x SAE J1939, 1 Mbps
AX188001	2x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x CANopen®
AX181000	4x TC inputs 10x signal inputs	The CAN lines are isolated from the signal inputs and the TC inputs.	1x SAE J1939, 250 kbps
AX181000-03	4x TC inputs 10x signal inputs	The CAN lines are isolated from the signal inputs and the TC inputs.	1x SAE J1939, 500 kbps
AX181001	4x TC inputs 10x signal inputs	The CAN lines are isolated from the signal inputs and the TC inputs.	1x CANopen®
AX186000	6x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x SAE J1939, 250 kbps
AX186000-01	6x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x SAE J1939, 500 kbps
AX186000-02	6x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x SAE J1939, 1 Mbps
AX186001	6x TC inputs	All inputs are fully isolated from the CAN line, the power supply, and all other inputs.	1x CANopen®
AX185000	20x TC inputs	All inputs are fully isolated from the CAN line and power supply.	1x SAE J1939, ABR
AX185000-10	20x TC inputs	All inputs are fully isolated from the CAN line and power supply.	1x SAE J1939, 250 kbps
AX185001	20x TC inputs	All inputs are fully isolated from the CAN line and power supply.	1x CANopen®
AX185010	20x TC inputs	Each of the TC inputs are isolated from each other. The inputs, CAN line, and power supply are isolated.	1x SAE J1939, ABR
AX180800	20x TC inputs 2x RTD inputs 4x signal inputs 6x relay inputs	All inputs are fully isolated from the CAN line and power supply.	2x SAE J1939, ABR 1x Ethernet, Modbus TCP/IP



You can browse through our catalog of [Thermocouple \(TC\) Modules](#) and other [Engine Temperature Monitoring Solutions](#).

Axiomatic specializes in the design and production of control solutions tailored for diverse applications where performance and reliability are of utmost importance. Our team of engineers are based in both Canada and Finland, while our manufacturing operations are located in Canada. Sales offices are in Australia, Canada, Finland and USA.

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