ENABLING OPERATORS
TO SENSE, SEE AND KNOW MORE

maxAI™ 280 CAN Bus Display

Critical vehicle and equipment data is easy to monitor with the maxAI 280. You'll have a high degree of control in a compact, cost-effective package, with multiple options to customize the display:

- **maxAI Configurator Tool: Select the parameters you want to display and your engine monitoring data will autopopulate.**
- **maxAI Design Studio: Personalize your display to fit your needs with our software development kit.**
- **maxAI Specialized System: Partner with our engineering team to develop a custom interface that meets your specific application needs.**

Complimentary to our full CAN Bus and DDBI portfolio, the maxAI 280 has five configurable inputs and four outputs to fit your needs for ideal flexibility. The integrated Bluetooth® capability means the display can receive wireless updates, and you can troubleshoot the system without removing the device. A micro-controller ensures access to engine performance data in seconds.

maximatecc

maxAI 280: DELIVERING HIGH FLEXIBILITY AND CONTROL

maximatecc is continually focused on innovative ways to communicate critical data using the most comprehensive designs. As electrification increases in many markets and OEMs adopt battery management systems, you'll find the maxAI 280 provides the right real-time information, including key engine parameters, warnings and system messages.

Two available models:

- **maxAI 280: One CAN channel, two configurable inputs and one output**
- **maxAI 280b: One CAN channel, five configurable inputs, four outputs and Bluetooth connectivity**

Both models include these display features:

- **Vibrant 2.8-inch TFT screen with 240x320 resolution and wide viewing angles**
- **Multiple screens with up to four parameters**
- **Screen setup via configurable application software**
- **Boots up in less than 3 seconds**
- **Amber and red dead front LED warning indicators**
- **250 or 500 Kbps baud rate detection**
- **IP67 rating (front and rear) with tempered glass lens**

maxAI CAN BUS DISPLAY SERIES

The maxAI CAN Bus Displays offer a range of customizable solutions to maximize your gauge and display experience. Built for rugged wear and tear, the maxAI will get you the information you need when you need it.


maxAI 130

maxAI 430 & 430V

maxAI 430i & 430iV

maxAI 280 PRODUCT SPECIFICATIONS

Processing	
Main Processor	Micro-controller based on ARM® Cortex®-M7 32-bit
Internal Memory	1MB RAM, 2MB Flash
External Memory	16MB Flash, 64KB EEPROM
Display	
Type	Premium TFT
Size & Resolution	2.8'' diagonal, 240 x 320 pixels, IPS full view angle
Color Depth	18-bit RGB
Contrast Ratio	800:1
Brightness	600 NITS
Interfaces	
Keypad	4 button keypad, can be used to navigate or select menu items
Connectors	maxAI 280 & 280b: 1 Deutsch 8-Pin connector maxAI 280b: Add'l. 1 Deutsch 6-Pin connector
CAN	1 CAN, J1939, bit rate config. 5Mbps
Inputs	maxAI 280: 2 config. inputs maxAI 280b: 5 config. inputs: voltage, resistance, frequency and digital
Outputs	maxAI 280: 1 config. output maxAI 280b: 4 config. outputs
Power Supply	12- and 24- volt systems, 9-32 VDC
Warning Lights	Amber/Red dead-fronted LED indicator
Bluetooth	maxAI 280b: For wireless configuration
Software	
Operating System	Optimized Free RTOS based on MIT's open source standard
Application Software	Freely programmable toolchains, primarily programmed via GNU C/C++ and supports application modules and library additions, JTAG/serial wire debugging
Environment	
IP Class	IP67 (front and rear)
EMS Conformity	ISO 13766 (emissions & immunity)
SAE Standard	Vibration, UV, salt spray and chemical
Temp. Range	-20 to 70°C (operational) -30 to 80°C (storage)
Casing	
Housing Material	Black PC/ABS plastic, UV resistant
Cover Lens	Tempered glass
Mech. Installation	Flush/panel mounting, SAE 3⅜'' standard
W x H x D (in/mm)	4.11/104.41 x 4.11/104.41 x 2.86/72.53
Weight (oz/g)	7.27oz/206g
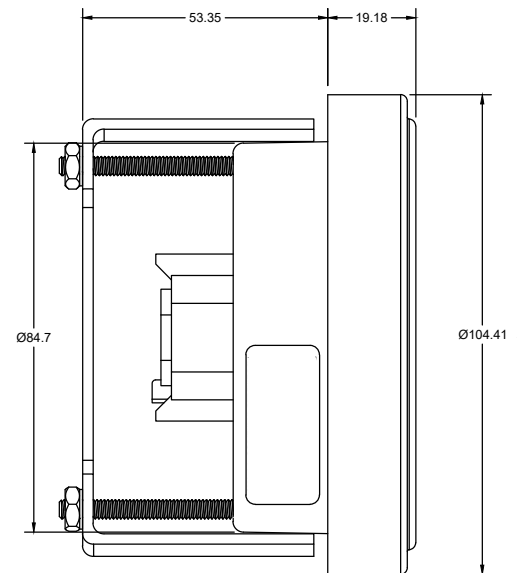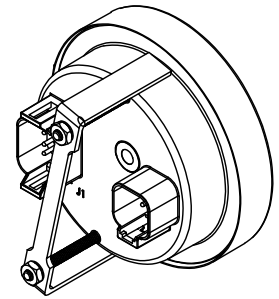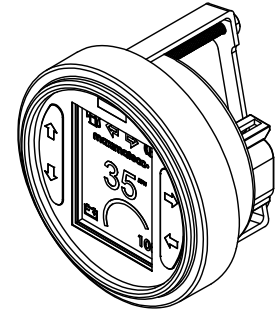
J1 Connector pinout (maxAI 280 and maxAI 280b)		
#PIN	**TYPE**	**STATE**
J1.1	Power	Battery+
J1.2	Power	Key on
J1.3	CAN	CAN low
J1.4	CAN	CAN high
J1.5	Config. input	Voltage/digital/resistance/freq.
J1.6	Config. input	Voltage/digital/resistance/freq.
J1.7	Digital output	Low/high side driver
J1.8	Power	Ground

J2 Connector pinout (maxAI 280b only)		
#PIN	**TYPE**	**STATE**
J2.1	Digital output	Low/high side driver
J2.2	Digital output	Low/high side driver
J2.3	Config. input	Voltage/digital/resistance/freq.
J2.4	Config. input	Voltage/digital/resistance/freq.
J2.5	Config. input	Voltage/digital/resistance/freq.
J2.6	Digital Output	Low/high side driver
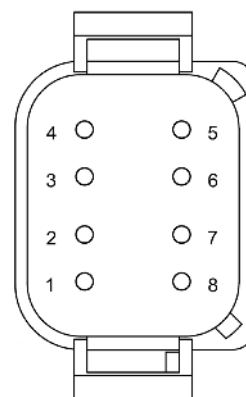
J1
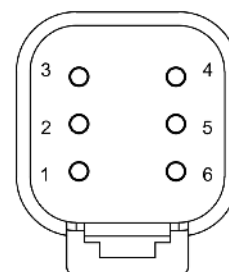
J2

maximatecc specializes in operator-machine interface solutions for critical environments. We support industrial machinery OEMs and partners globally with a broad portfolio of products and services. Through technology, engineering expertise and operational excellence, we make machines smart, safe and productive.

maximatecc

Enabling operators to sense, see and know more