

# PentaFlex

5-gauge instrumentation cluster platform



**PentaFlex** builds on our long track record of providing instrumentation cluster solutions to industrial vehicle OEMs globally.

It comes in three model variants with different display solutions; 7 segment LCD, 320\*240 dot-matrix or 3''5 WQVGA TFT. This means there is PentaFlex solution for different functionality/cost points, satisfying HMI needs for different applications and markets. With the LinX™ software tool, PentaFlex is easily configured to a specific application, reducing resource spend in system engineering and maintenance. PentaFlex is designed to facilitate easy customization of artwork, enabling an instrumentation solution that resonates with cab industrial design and the vehicle brand.

**Turn for technical specifications »**

**The content herein is preliminary and may be subject to change without further notice.**

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## General specifications

DISPLAY	
TYPE	Base Model: 7 segment LCD Advanced Model: 320 x 240 Dot Matrix White Backlighting Premium Model: 3.5" WQVGA
INDICATORS	10-27 LED status indicators; lighted pointers
ILLUMINATION	LED backlighting
INPUTS/OUTPUTS	
GAUGES	5 x Resistive or voltage output senders or CAN data
TACHOMETER	Input via MPU, alternator or CAN
INDICATORS	All indicators are configurable based on digital inputs, analog inputs, or CAN data
LIGHTING	Controlled from digital input or CAN data
SWITCHED OUTPUTS	2 high side switched outputs and internal buzzer
POWER	
VOLTAGE	24V nominal (18-32V) (or 12V)
ELECTRICAL PROTECTION	Reverse polarity, transients including load-dump, over-voltage and ESD
CURRENT	Standby current draw <7 mA
ENVIRONMENT	
IP CLASS	Front IP67, Rear moisture-/dust-resistant
TEMPERATURE RANGE (°C)	-30°C to +85°C (operating) -40°C to +85°C (storage)
EMC CONFORMITY	ISO 13766 (radiated emissions) SAE J1113-21 (radiated immunity)
SAE COMPLIANT	Vibration, UV, salt spray and chemical compatibility
ENCLOSURE	
HOUSING	UV-resistant PC/ABS
MOUNTING	Panel installation
SIZE AND WEIGHT	
W x H x D (mm/inches)	322/12.7 x 171/6.7 x 67/2.4
WEIGHT (kg/lbs)	1.14/2.5

## PIN ASSIGNMENTS

Connector is lead-free & RoHS compliant

PIN #	TYPE/FUNCTION
1	Ground/Ground Supply
2	24V Permanent Battery
3	Ignition Switch Input
4	Frequency Input/Tachometer
5	Frequency Input/Speedo
6	Frequency Input/Spare
7	Analog input/Gauge
8	Analog input/Gauge
9	Analog input/Gauge
10	Analog input/Gauge
11	Analog input/Gauge
12-25	STB-STG/Status Indicator
26	Reserved
27-34	STB-STG/Status Indicator
35	STB/Backlight
36-43	STB-STG/Digital Input
44	High Side Output
45	High Side Output
46	CAN High
47	CAN Low
48-52	Reserved

Memo: "STB" = switch-to-battery, "STG" = switch-to-ground.

## CUSTOMIZATION OPTIONS

Typical changes pertain to artwork and gauge functions. Consult with your salesperson for more details.

**maximatecc**

AN ACTUANT COMPANY

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