

ECU MONITOR PLUS

PART NUMBER
1102-PLUS

The Engine Control Unit (ECU) Monitor Plus accessory is compatible with onboard vehicle computers that use CAN protocols (J1939/FMS), J1708/J1587, or OBDII. It comes with an RS-232 port for serial communication with third party device integration - this integration requires a Syrus Firmware plugin.

1-Wire interface connection
with Syrus GPS devices

2 CAN bus interface
connections to J1939
& FMS protocols

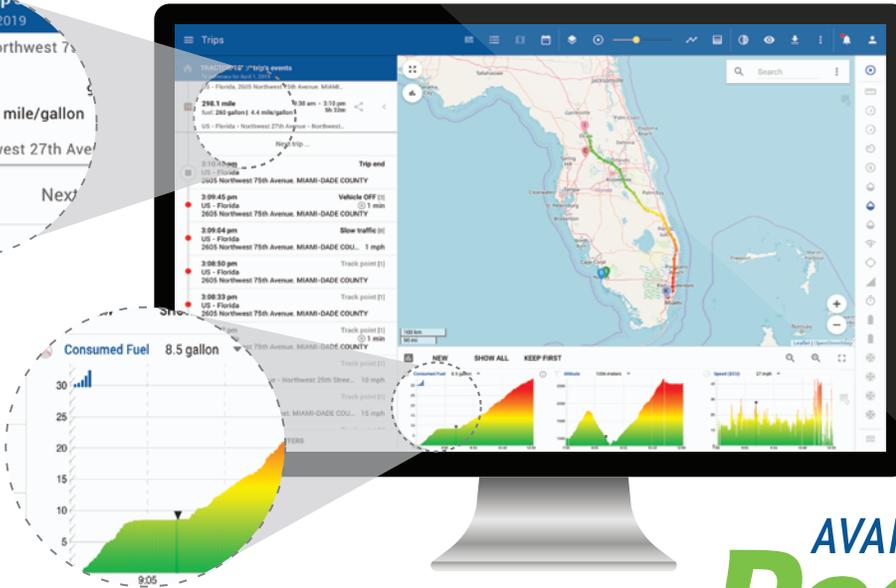
Additional interface
connection to J1708/J1587
protocols with TVS protection
circuit



4 status LED indicators
to signal connection &
protocol identification

External RS-232 port
for third-party device
integration

Fully supported for
Mobileye™ &
ContiPressureCheck™
via CAN interface



AVAILABLE ON
Pegasus
Gateway

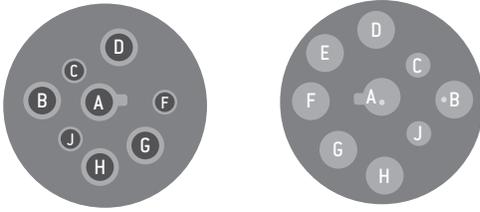
PINOUT

PIN #	WIRE COLOR	NAME	DESCRIPTION
CONNECTIONS TO SYRUS TELEMATICS DEVICE			
14	 GREEN	MAIN POWER (8V - 32V)	Must be connected to the Syrus main power cable (green - pin #14) or directly to the vehicle's battery positive terminal.
7	 BLACK	GND (Device's Electrical Ground)	Must be connected to the Syrus GND (black - pin #7) or the same GND connection used by the Syrus. This is usually the vehicle's battery negative terminal.
4	 WHITE	1-WIRE	Must be connected to the Syrus 1-Wire bus (red/white - pin #4).
5	 YELLOW/ LIGHT GREEN	RS232 TRANSMIT DATA	RS232 - TX (Transmitter)
12	 LIGHT BLUE	RS232 RECEIVE DATA	RS232 - RX (Receiver)
CONNECTIONS TO THE VEHICLE'S ENGINE			
8	 YELLOW	CAN1_H	Primary positive signal of the J1939/FMS bus. Connect to the vehicle's CAN_H cable. This cable is twisted together with the green CAN1_L cable.
9	 GREEN	CAN1_L	Primary negative signal of the J1939/FMS. Connected to the vehicle's CAN_L cable. This cable is twisted together with the yellow CAN1_H cable on the ECU Monitor.
6	 CYAN	CAN2_H	Secondary positive signal of the J1939/FMS bus and Mobileye™ accessory. Connect to the vehicle's CAN_H cable. This cable is twisted together with the white/light green CAN2_L cable.
13	 WHITE/ LIGHT GREEN	CAN2_L	Secondary negative signal of the J1939/FMS bus and Mobileye™ accessory. Connect to the vehicle's CAN_L cable. This cable is twisted together with the cyan CAN2_H cable.
10	 PURPLE	J1708A+	Positive signal of the J1708 bus. Connect to the vehicle's J1708A+ cable. This cable is twisted together with the brown J1708B- cable.
3	 BROWN	J1708B-	Negative signal of the J1708 bus. Connect to the vehicle's J1708B- cable. This cable is twisted together with the purple J1708A+ cable.
11	 ORANGE	K-LINE PIN	Used by the OBDII protocols ISO14230 (KWP2000) and ISO9141.
CONNECTIONS TO THE VEHICLE'S FUEL TANK LEVEL SENSOR			
1	 BLUE	*FL +	Positive input for the fuel tank level sensor. This cable is twisted together with the gray FL- cable on the ECU Monitor.
2	 GRAY	*FL -	Negative input for the fuel tank level sensor. This cable is twisted together with the blue FL+ cable on the ECU Monitor.

*Operation range in differential mode: 0 - 5V

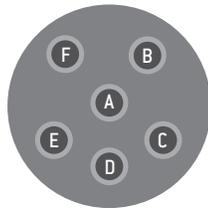
Warning: The cables used to connect to the vehicle's engine must NOT be cut. If the cables must be cut for any reason they must be cut to the same length and must be kept twisted.

CONNECTION DIAGRAMS



9 PIN CONNECTOR PINOUT

- A: GND. Must be the same GND connected to the Syrus.
- B: Vehicle's battery positive terminal [+].
- C: CAN_H. Positive signal of the J1939 bus.
- D: CAN_L. Negative signal of the J1939 bus.
- F: J1708A+. Positive signal of the J1708 bus.
- G: J1708B-. Negative signal of the J1708 bus.



6 PIN CONNECTOR PINOUT

- A: J1708A+. Positive signal of the J1708 bus.
- B: J1708B-. Negative signal of the J1708 bus.
- C: Vehicle's battery positive terminal [+].
- E: GND. Must be the same GND connected to the Syrus.

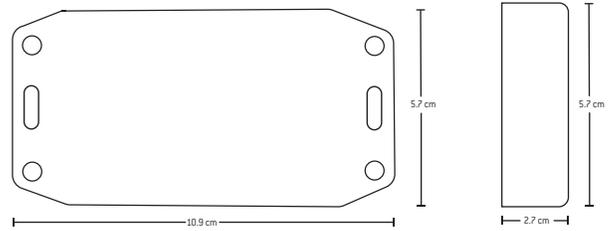


FMS BUS CONNECTOR PINOUT

- Pin 1: CAN high
- Pin 2: CAN low
- Pin 3: Option CAN ground
- Pin 4: Not used by Bus-FMS-Standard

DEVICE DIMENSIONS

10.9 x 2.7 x 5.7 cm [L x W x H]



ELECTRICAL SPECIFICATIONS

ITEM	PARAMETER
Power Voltage Input Range	9V - 32V
Current Consumption	60mA @12V
Protections	Voltage transients Short circuits Reverse polarity

OTHER SPECIFICATIONS

ITEM	PARAMETER
Material	Epoxy resin
Compatible with other platforms	Via Syrus Firmware Plugins

PEGASUS CONFIGURATION

COMMANDS

Query ECU Diagnostic >QXAEM0;+<	Scan J1939 & J1708 >SXAEMP11006<
Scan OBDII >SXAEMP2<	Turn on Listen Only Mode for J1939 & J1708 >SXAEML3<
Scan only J1939 >SXAEMP11002<	Turn off Listen Only Mode >SXAEML0<
Scan J1708 & Mobileye™ >SXAEMP11012<	Scan only Mobileye™ >SXAEMP21008<
Scan OBD & Mobileye™ >SXAEMP21010<	

* For more information on the latest stable firmware versions, please visit our support website at support.digitalcomtech.com