



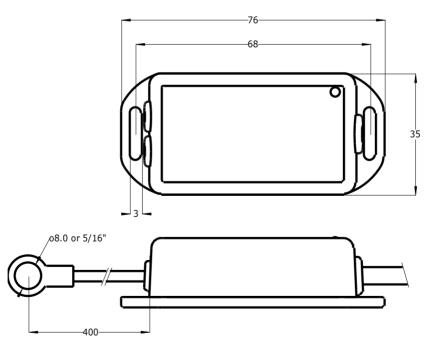
### 1. Description

Battery Voltage Sensor is a part of the E-MAAX regulator system; it measures voltage across the batteries and reports the measured values to the connected regulator. It is compatible with E-MAAX PRO and PLUS series regulators. The Voltage Sensor is designed to be connected directly onto the battery posts via the 8mm (5/16") lug connectors (non-polarity specific). It is important to the regulation process that the Voltage Sensor be directly connected to the battery post, with no intervening connections, as any voltage difference from the alternator is used to optimize the charging set points. When connecting, care must be taken to provide good electrical contact between the posts and the sensor. Sensor's LED provides a visual indication that the sensor is connected to the regulator, it flashes once in 2 seconds.

# 2. Specifications

Parameter	Value	Units
Measured voltage range on each lead	-5 +50	Volt
Measurement accuracy	0.01	Volt
Weight	200	grams
Housing material	Plastic, black	-
Lug connector size	8mm or 5/16"	-
Lead length	0.4	m
Cable length	3.0	m
Operating range	-40 +125	Celsius deg
Protection	IP 57	-
Maximum allowable shock	3	G
Maximum allowable relative humidity	95	%

#### 3. Dimensional outline



All units are millimeters

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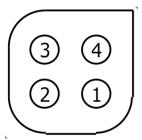


# Battery Voltage Sensor Datasheet

## 3. Electrical specifications

Parameter	Value	Units
DC voltage supply range	620	Volts
Current consumption	0.020	Amps
LED color	Green	-
Cable ratings	Gauge: 20 AWG	-
	Material: tinned copper strands	
	Strand size: Ø 0.16 mm	
	Insulator Material: PVC	
	Jacket Color: black	
	Diameter: 5.5 mm	
Communications format	RS-485	_
Wire colors designations	black – battery negative (isolated from the housing)	-
	red – DC positive supply (isolated from the housing)	
	white – communication lead "A"	
	yellow – communication lead "B"	
Connector pin-out	1 - black - battery negative	-
	2 - red – DC positive supply	
	3 - white – communication lead "A"	
	4 - yellow - communication lead "B"	

4-pin connector pins, view from the cable side



### Notice

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