

# Model MX 42 VP module Pulse and Encoder Module for evoQ<sub>4</sub>

## Product Specification



Specifications	
Power source	3 V Lithium battery (10 yr)
Environmental rating	NEMA 6P / IP68
Operating temp.	14 to 131 F (-10 to 55 C)
Storage temp.	-4 to 140 F (-20 to 60 C)
Materials	ABS Resin

Encoder	
Protocol	Sensus (specify 6 or 8 digit)
Encoder ID	10 digit fixed
Connection	25' cable with bare wire, Nicor or Itron connector

Pulse	
Pulse logic	Forward Net
Pulse weight	1 pulse = 1 USG / 0.1 Cuft / 1 L
Max pulse freq	100 hz
Min pulse width	5 ms
Signal type	Open drain FET
Connection	Bare wire 25'
Max load current	20mA
Max load voltage	30 VDC

### Operation

The VP module for evoQ4 combines a sensus protocol encoder channel and a high resolution pulse channel for use with both an AMR/I radio end point and typical industrial monitoring systems using the pulse input. Remote counters, PLC, and SCADA systems are typical.

Specify encoder resolution (6 digit or 8 digit). Encoder connection types include three wire bare - for splicing to three wire radio endpoints, and Itron or Nicor connectors.

Bare wire cable function:

Red: Data

Green: V+ (power)

Black: V0 (ground)

Pulse resolution is fixed but depends on the units of registration of the meter to which the module is attached.

USG: 1 pulse = 1 USG

CuFt: 1 pulse = 0.1 Cuft

M3: 1 pulse = 1 Liter

The pulse logic is fixed at Forward Net.

Reverse totalization will not cause an output, but reverse total is stored in a memory buffer. As forward flow resumes, The reverse total buffer will decrease until forward flow has equaled the buffer, in effect zeroing it out. The pulse train then resumes as normal with continued forward flow.

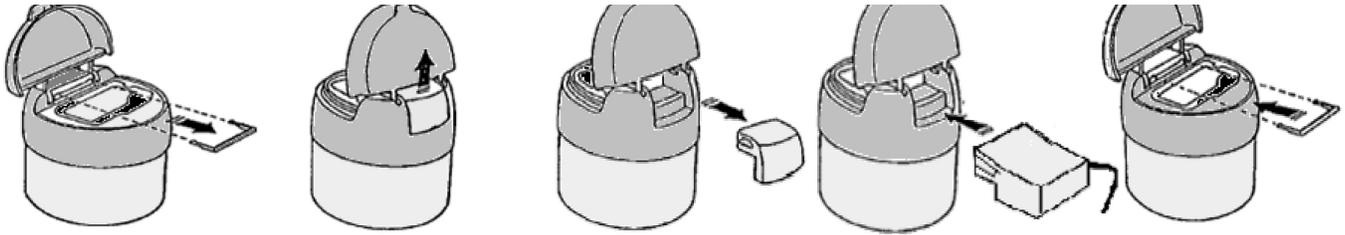
Pulse cable function:

Green: Pulse signal

Black: V0 (ground)



## Module attachment as a field retrofit



1. Lift the lid. Using a small screwdriver blade, carefully remove the pulser clip

2. Remove the blank cover by lifting it up...

3. ...and then slide out

4. ...Fit the pulser unit in the opposite manner to the cover removal\*

5. ...replace the securing clip (lugs uppermost)

\*Warning: Take care not to dislodge the rubber gasket on the underside of the unit when fitting/removing.



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