

Introducing the Latest Improvement to the Rosemount 8712 Magnetic Flowmeter

Emerson Process Management has recently released a new revision level of its' popular Rosemount 8712 Magnetic Flow Transmitter. The Rosemount 8712D is a direct replacement of the Rosemount 8712C and Rosemount 8712U transmitters. The 8712D is based on the latest Rosemount transmitter architecture, enabling the additional transmitter and PlantWeb® functionality while maintaining the intuitive, easy to use Local Operator Interface (LOI) and convenient wall mounting of the 8712C.

Rosemount 8712D Maintained Functionality:

- World's most intuitive, easy to use Local Operator Interface (LOI).
- Fully compatible with all standard Rosemount magnetic flowtubes: 8705, 8711, 8721.
- Can be used with 8707 High Signal flowtubes if the flowtube has been dual calibrated (D2 option). (1)
- Convenient wall mount, dual compartment transmitter enclosure.

Rosemount 8712D Enhancements:

- Next generation Digital Signal Processing (DSP) architecture, providing improved process noise performance and electrical noise immunity.
- Non-volatile totalizer standard on all transmitters.
- 8712U Universal capability included in 8712D, enabling this transmitter to work with any manufacturers magnetic flowtube.
- Expanded I/O functionality and specifications.



Rosemount 8712D Future Enhancements:

- User-definable Flexible Inputs and Outputs – estimated release Summer 2004.
- PlantWeb® Advanced Diagnostics – estimated release Summer 2004.
- Transmitter Circuit Board Temperature – estimated release Summer 2004.

| | 8712C | 8712D |
|-----------------------------|--------------------------------|---|
| Pulse Output | 0.007 HZ to 1000 Hz. | 1 pulse/day to 10,000 Hz |
| DC Power Supply | 10 to 30 VDC | 12 to 42 VDC |
| AC power supply | 2 models: 115VAC or 230VAC | One model for 90-250VAC |
| Updates (effects stability) | 18 per second (good stability) | 75 per second (best stability) |
| Operating temperatures | 20°F to 150°F w/o LOI | -40°F to 164°F w/o LOI |
| Maximum velocity | 30 ft/sec | 42 ft/sec |
| Ambient Temp effect | ±1% per 100° | ±0.25% over operating temperature range |
| Universal Capability | Optional | Standard |
| Nonvolatile Totalizer | Optional | Standard |
| CE Mark (European Approval) | Optional | Standard |
| Tunable Empty Pipe features | NA | Standard |

(1) The 8712D is a standard transmitter. To receive high signal performance in extreme noise processes, you should use a Rosemount 8712H High Signal Transmitter with the 8707 flowtube.



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Rosemount 8712D

FREQUENTLY ASKED QUESTION:

Will the 8712D work with the Rosemount flowtubes I already have in my plant?

Yes, the 8712D will work with any 8705, 8711, 8721, or 8707 flowtube. (Use with the 8707 requires the dual calibration D2 option on the flowtube.)

I like the LOI on 8712C. Has that changed?

No, the LOI on the 8712D is exactly the same as the 8712C LOI. The new functionality is incorporated into the existing LOI so it is still as easy to use as ever.

What do I do if one of my existing 8712C's fails?

A new 8712D transmitter can be used as a direct replacement, or a new 8712D board can be used to replace a failed 8712C board. AC powered transmitters will require removal of the 8712C transformer as the AC components have been included on the new 8712D board. Easy to follow instructions are available to facilitate replacement.

Can I add diagnostics to an 8712D at a later date?

Yes, the diagnostics will be available as a software upgrade. Installation will require swapping a memory chip and can be done on site or at an Emerson Service Center, following sound electronic practices.

Will my existing hand-held communicator work with the 8712D?

Yes, providing the communicator has the Device Descriptor (DD) for the 8712D. The additional functionality added to the 8712D has required us to create a new DD. To check to see if your 375/275 has the 8712D DD, follow the following steps:

1. Power up the hand-held with nothing connected
2. Select "Utility"
3. Select "Simulation"
4. Select "Rosemount"
5. Cursor to check for "8712D"

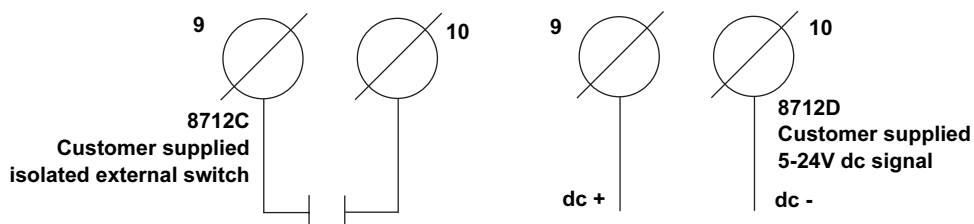
If you cannot find 8712D, you will need to contact your local Service Center to load the latest versions of this DD onto your Hand-held.

Can I set up an 8712D without the Hand-held Communicator?

Yes, as always you could use the LOI to set up the transmitter. Further, Rosemount will enter customer data into the transmitter at the factory. Rosemount is providing the 8712D C1 custom configuration option at no charge until September 30, 2004.

Are there any changes that may effect my field wiring?

There is one change that effects those users who used the PZR, or Positive Zero Return (terminals 9 and 10.) To activate the PZR on the 8712C, the customer provided a switch closure that shorted across terminal 9 and 10. This resulted in the transmitter output being driven to zero. With the 8712D, the customer must supply a 5-24Vdc signal to terminals 9 and 10 as shown. When the DC signal is sent to terminals 9 and 10, the transmitter will set the output to zero.



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