
DIGITAL MONITOR MODULE (DMM003)

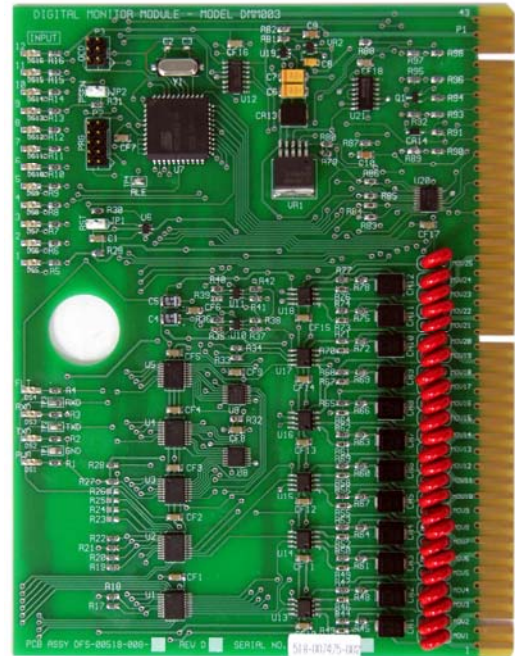
DESIGNED FOR USE WITH THE 200 SERIES RTU FAMILY, DFS RTU MODULES ARE ASSEMBLED FROM THE HIGHEST QUALITY COMPONENTS AND DESIGNED TO MAXIMIZE USABILITY WHILE MINIMIZING INSTALLATION, MAINTENANCE, AND DOWNTIME.

The Digital Monitor Module (DMM003) is a microprocessor-controlled, digital input module designed to monitor from one to 12 digital inputs. Each input is optically isolated with transient suppression for protection from voltage spikes.

The DMM003's inputs are user-configurable as pulse inputs making it capable of monitoring pulse inputs such as those produced by a tipping bucket rain gauge.

The DMM003 features a solar mode that uses awake/sleep cycles to conserve battery power when installed in solar RTUs. During a sleep phase, the DMM003 uses only ~15% of the power typically expended while it is "awake." The DMM003's design allows it to continue to monitor and count pulses for up to two inputs even while it is "asleep."

The DMM003 can directly monitor AC or DC voltages from 10 to 30 V. By inserting a 22/47/100 K ohm resistor in series, an input can monitor from 31 to 300 VAC/DC. Each change at the monitored point is time-tagged to within 2 seconds of occurrence to maintain accurate event logging. This is critical when calculating pump run times and derived flows.



FEATURES AT A GLANCE

- 12 digital or pulse input points (user-selectable; for solar applications, only two inputs can function as pulse inputs)
- Solar mode that uses awake/sleep cycles to limit battery consumption in solar power applications
- Opto-isolated input points
- 1200 or 9600 baud communication
- Time-tagged messages
- On-board communications and functional firmware
- On-board voltage regulation
- LEDs for Power, receive data, transmit data, input status, and CPU fault
- Surge protected (nondestructive)
- Removable without disturbing field wiring
- No on-board adjustments, switches or straps (self-configuring)
- Keyed to prevent damage

SPECIFICATIONS

Model	DMM003
Board Size	5.25" x 6.88"
Input Voltages	10-30 VAC/VDC; 31-300 VAC/VDC with inline resistors
Input Protection	M.O.V., Transorb, and Opto-isolated
Input Impedance	6K Ohm
Power Requirements	9 – 14 VDC 80 mA: non-solar operation / awake 10 mA: sleep mode
Minimum Pulse Width	10 ms
Maximum Burst Frequency	60 PPS: non-solar operation / awake 40 PPS: sleep mode
Maximum Continuous Frequency	Non-solar operation: [4095 / polling time (s)] or 60 PPS, whichever is lower. Solar operation: In this mode, the TIM007 is polled every minute, allowing for the maximum 60Hz (awake) / 40Hz (asleep).
LEDs	Power, receive data, transmit data, input status, CPU fault
Solar Application Requirements / Notes	Requirements: <ul style="list-style-type: none"> TIM007 Telemetry Interface Module Hyper SCADA Server with HT3 3.1.1 or newer installed Must be polled with solar mode of Derivative Fractional Protocol (DFP) Notes: <ul style="list-style-type: none"> Only inputs 11 and 12 can be configured as pulse inputs

TYPICAL APPLICATIONS

- Pump Running
- Pump Fault Alarm
- HOA Position
- Commercial Power
- Phase Monitor
- Generator Status / Alarms
- Liquid Level Switch
- Pressure Switch
- Solenoid Valve Position
- Intrusion / Motion Alarm
- Relay Contacts
- Chemical Alarms
- Tipping Bucket Rain Gauge

WARRANTY

This product carries a one (1) year return-to-factory warranty against defects in material and workmanship. When installed with factory recommended surge protection, the return-to-factory warranty is extended to three (3) years and is also covered against damage due to lightning and surge. DFS will repair or replace at its option, F.O.B. Melbourne, Florida, any part or parts of this product during the warranty period. A Return Authorization (RA) must be obtained by contacting the DFS Factory Repair Center at 321-259-5009 or by email at rma@dataflowsys.com.