

# JOWA USA

## Multi-Channel Monitoring System MC-2200 Series

### Features:

- Low Cost Inventory Monitoring
- Accuracies to 1/8 inch
- Accepts up to 22 Analog inputs; Level, Temperature, Pressure etc.
- User Configurable Reporting Schedule
- Direct input for Rollie Level Detector (RLD) or Metritape Level Systems
- Multiline LCD display for viewing of data (Tank Label, Level, Volume, & Alarms)
- Simple setup through LCD and keypad

### Options:

- Send e-mail message with all input data (e.g., Levels, Volumes & Alarm Status)
- Relays for local Alarm Lights and/or Horns
- Modbus Interface for connection to Wireless Base Radio
- Modem Dial-in Capability

### Description:

The MC-2200 System is designed for monitoring the liquid inventory at bulk storage outlets or distribution points. The basic system accepts up to 22 analog inputs for monitoring level, temperature or pressure. The user-friendly LCD and keypad located on the front panel enables viewing of tank data and easy access to system setup parameters.

The MC-2200 iNet model enables optional Internet access through the addition of a built in Internet Access Module (IAM) and use of an existing standard telephone line. The system can be configured to dial out to our ISP and send an email message containing all the tank levels, volumes, temperatures and alarm status. Hundreds of local access numbers are available to reduce or avoid long distance phone charges.



The MC-2200 iNet is particularly well suited to the needs of those who operate multiple locations. The ability to report daily inventories to a central office through the IAM saves countless hours of labor by eliminating the need for operators to stick gauge tanks and manually generate hard copy reports.

Optional relays are available to activate external horns or warning lights. Also available as an option is a Modbus interface for connection to a wireless base radio.

The optional remote dial-in capability allows level, volume and alarm status data to be retrieved via a phone line from any PC with a modem. No special software is required.

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## Technical Specifications:

**Power Requirements:** 120 VAC nominal, +10% -15%, 60Hz, single phase.

**Power Consumption:** 60VA maximum, < 500mA

**Inputs:** Rollie Level Detector (RLD), 4-20mA, 0 - 10VDC, and Modbus Serial RTU data.

**Accuracy:**  $\pm 1/8"$  with Rollie Level Detector (RLD),  $\pm 1/4"$  with Metritape Level Sensor, or accuracy of alternate measuring device.

**Analog Input Accuracy:** 12-bit AD converter

**Display:** 122 x 32 Graphic LCD (Backlit), 3 Lines of 16 Characters, each approximately 1/4" high  
7 Keys for Setup and Display Selection  
7 LED's for Alarms and Status

**Memory Backup:** Non-volatile flash storage of programs and calibration data. 10 year, 3V coin cell battery for backup of RAM stored historical data. Time stamped data via battery backed RTC.

**Serial Communications:** Optional RS-232 or RS-485 with Modbus protocol.

**Ambient Operating Temperature/RH:** 32°F to 122°F (0°C to 50°C) 5 to 90% non-condensing.

**Weight:** 8 lbs.

**Front Panel Rating:** NEMA 12.

### Options:

- Dial up modem
- Internet enabled modem
- Printer
- Relays - 5 SPST & 1 SPDT (30VDC @ 1A or 48VAC @ .5A)
- Analog output, 8 Channels (4-20mA)
- Weatherproof Enclosure, NEMA 4X.

### Self-Diagnostics:

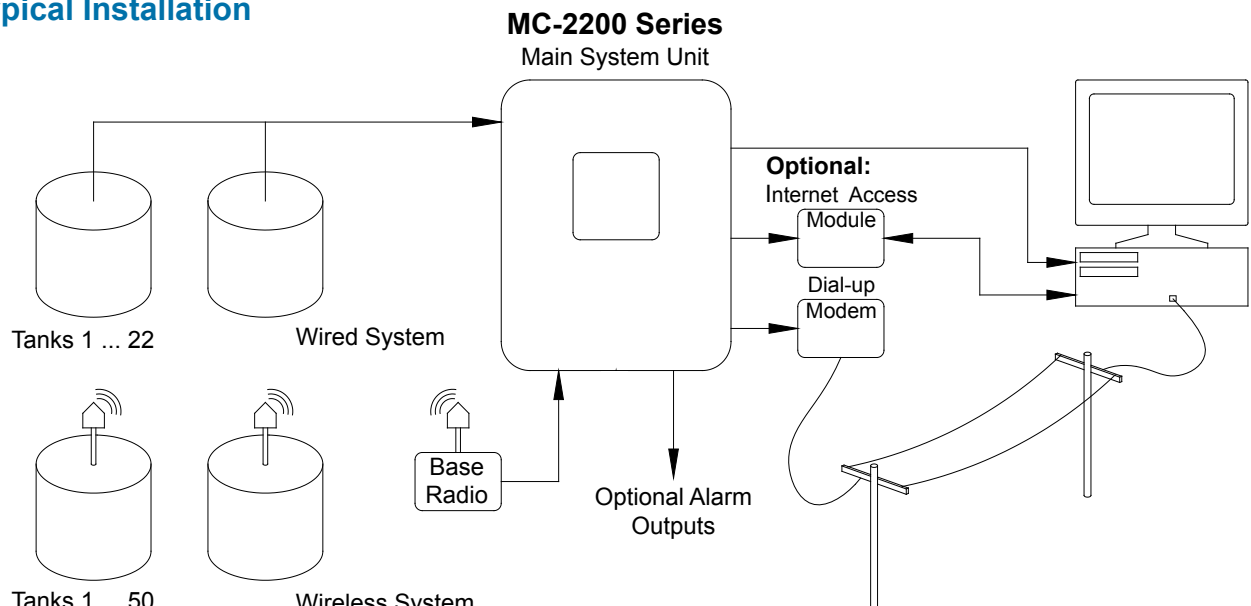
- Contains extensive self-checking software and hardware that continuously monitors the operation. Any sensor or device parameter out of spec is identified and reported.

### Modbus Interface:

- Interfaces with standard Modbus devices as input and output protocol.

**Dimensions:** 9.8" x 7.9" x 6.5" (H x W x D)

## Typical Installation



### Disclaimer:

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