

# RX300 Sensor Expansion Unit **RΔNCH**

SYSTEMS



#### **Sensor Inputs**

Analog Sensor ADC Resolution: 12-bit

Analog Voltage Range: 0 to 5VDC

Digital Counter Frequency Range: 0Hz to 10Hz

Digital Counter Power/Excitation: Optional constant excitation

Frequency Input Range: 0Hz to 10kHz

Frequency Input Power/Excitation: Optional constant excitation,

typically 50 mS

Irrometer Watermark Ports Accepted: Ports 1-3 Irrometer Watermark Isolation: 100% (relay switched)

Connectors: Push-type terminals

Configuration: Sensor inputs require node port configuration

#### **Control Outputs**

N.O. Switch Maximum Voltage: 24V N.O. Switch Maximum Current: 2 Amp DC Latching Maximum Voltage: 12VDC

DC Latching Maximum Current: 2 Amp (inrush) DC Latching Excitation Time: 100 mS (typical)

Connectors: Push-type terminals

Configuration: Outputs configured via on-board jumpers

#### Hardware

Operating Temperature: -40°F to 158°F (-40°C to 70°C)

Dimensions (H x W x D): 6.25 x 4 x 3.25 inches

(158.8 x 101.6 x 82.6mm)

### **APPLICATIONS**

- Irrigation & valve controls
- Water meter monitoring
- Watermark automation
- Applications requiring more sensor inputs than available on the RM210 or RS300

#### **FEATURES**

- Connects to any RM210 or RS300
- Four (4) NEMA 4-wire glands for sensor/relay wiring
- Supports up to four (4) analog or digital sensors
- Supports up to four (4) valves or relays
- Stand-alone micro-controller and analog/digital converter ensures accurate readings and eliminates cable loss
- Each 24V 1A relay can be configured for N.O. isolated switch or DC latching valve control
- When connected via RS-485, up to 15 RX300 units can be daisy-chained, for a total of up to 60 sensors and 60 relays over a distance of up to 1000ft
- Supports up to three (3) Watermark soil moisture sensors
- Counter capability on 4 ports (rain gauges and flow meters)
- All connections use push-button terminal blocks
- Remains in standby mode unless receiving commands from the host unit, such as retrieving sensor readings or activating relays

## **SPECIFICATIONS**

### **Host Unit Connection**

Connection Type

RX300-232: Includes a 10ft RS-232 cable with 6-pin female

connector

Can be extended up to approximately 35ft

Does not support daisy-chain configuration

RX300-485: Includes a 10ft RS-485 cable with 4-pin male connector

Can be extended up to 1000ft (including daisy-

chained units)

Up to 15 units can be daisy-chained using Y-adapter

cables

Connectors: Unless specified otherwise, all input and communication ports utilize SwitchCraft/Conxall Micro-Con connectors.







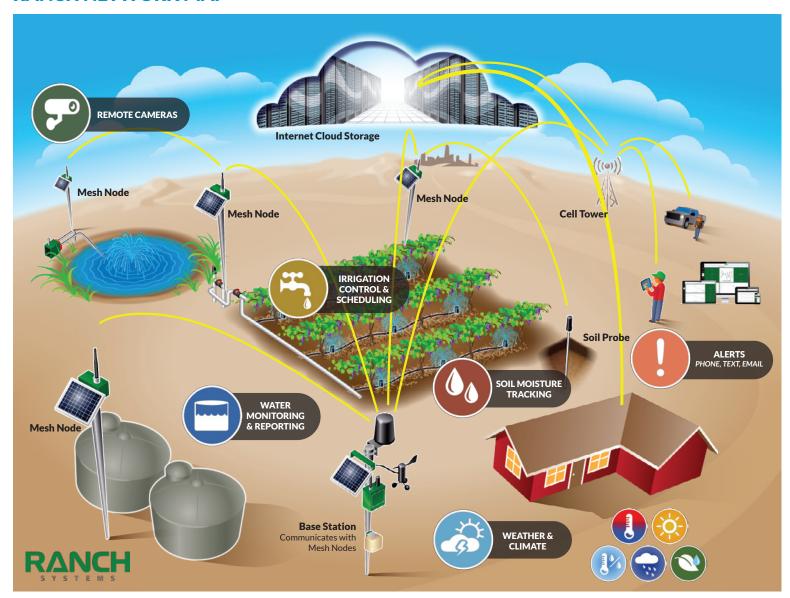








# **RANCH NETWORK MAP**



## **UNITS**











Telemetry Units -----

Expansion Units -----











