



Hardware

Enclosure: Powder-coated steel

Mount: Powder-coated steel bracket compatible with strut channel, simple pole, or direct screw-on mounting

IP Rating: IP66

Operating Temperature: -40°F to 185°F (-40°C to 85°C)

Dimensions (H x W x D): 13 x 10 x 5.5 inches (33 x 25 x 140 cm) without antennas

Weight: 28 lbs

Regulatory Approvals: FCC, ETSI, C-Tick

Communications & Input Ports

PORT	SIGNAL TYPE	TYPICAL USE
1	DC Power Input	Solar panel or AC to DC wall adapter
2	Serial RS-232	Serial communications port RX300-232 expansion unit Remote camera
3	Serial RS-485 (ASCII Modbus RTU) or SDI-12	Serial communications port RX300-485 expansion unit Soil moisture probes Modbus RTU-enabled variable speed drives
4 & 5	Digital Counter (0-10Hz) Frequency input (0-10kHz) Analog (0-5V DC or I2C compatible)	Wind speed/direction RX30-WS weather station
6 & 7 (2 each)	Analog (0-5V DC/AC) or I2C compatible	Temperature / Relative Humidity
8	Digital Counter	Rain Gauge
9	Analog (0-5V DC/AC)	Solar radiation Leaf wetness

APPLICATIONS

- Weather station
- Soil moisture monitoring
- Mesh network controller
- Irrigation control unit

FEATURES

- Maintains constant connectivity to Ranch Systems cloud
- Controls actions programmed in Ranch Cloud software
- Executes irrigation programs
- Transmits start/stop commands to equipment with nodes.
- Acts as a complete sensing and control unit
- RX300 or RL200 can be attached (one or more)

SPECIFICATIONS

Wide Area Network/Server Connection Configurations

Modes: - GSM/2G Quad-Band

- CDMA/Verizon (USA)

- GSM/3G/HSPA/Telstra (International)

- WiFi 802.11

Antenna Type: Varies by configuration

Local Area/ Mesh Network Radio Configurations

Modes: - 2.4GHz

- 900MHz low-power

- 900MHz high-power

Antenna Type: Varies by configuration

Typical Range: - Up to 0.25 miles with 2.4GHz radio

- 0.5 to 1 miles with 900MHz low-power radio

- 1 to 2 miles with 900MHz high-power radio and high gain antenna

Power

Solar Panel / Wall Charger: Up to 6A solar panel or wall charger (sold separately)

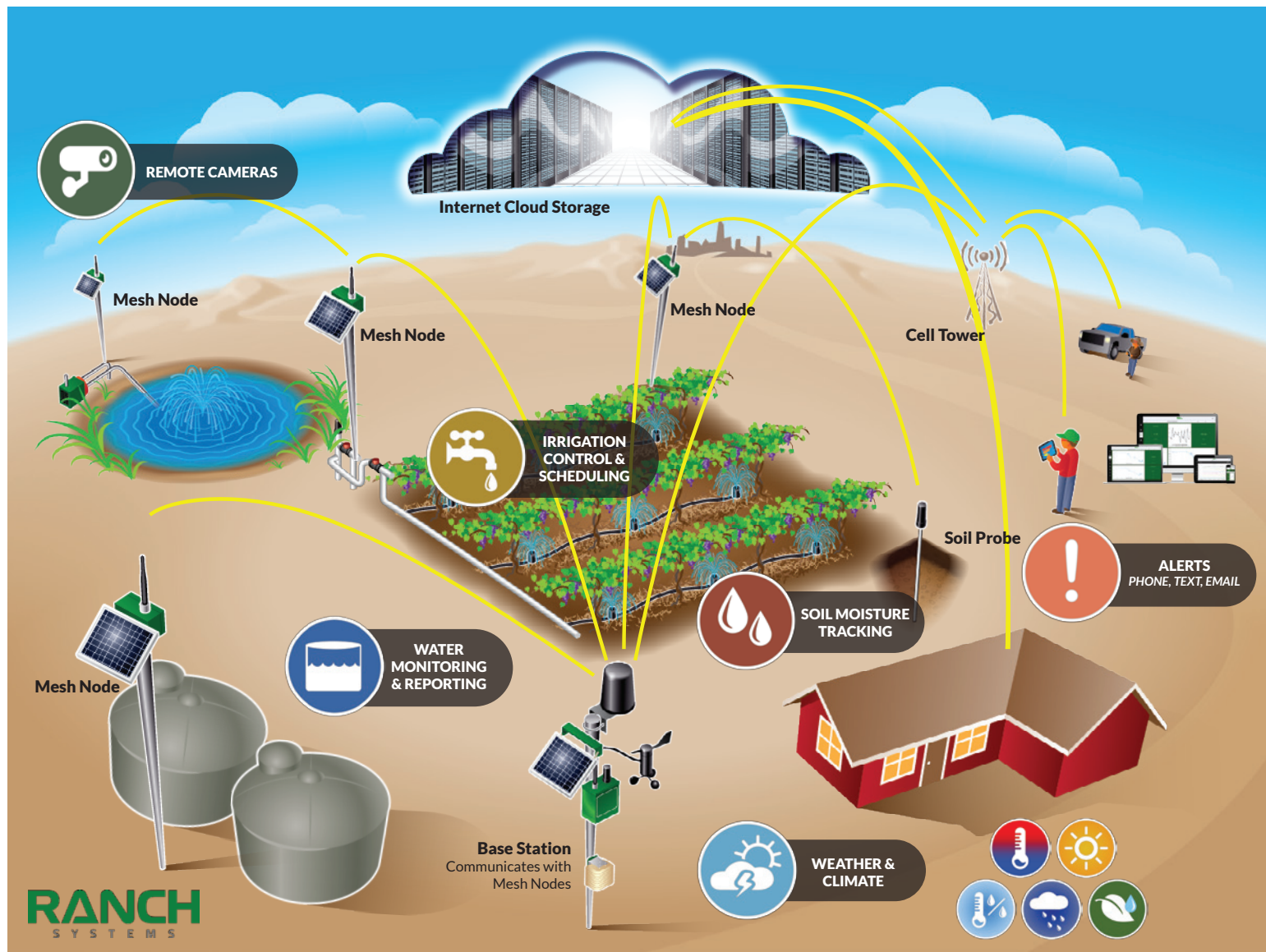
Charge Regulation: PWM built-in

Internal Battery: 12V lead acid, 20Ah

Typical Run Time: 2 to 4 days without sunlight (hibernation mode available)



RANCH NETWORK MAP



UNITS



RS130



RM210



RS300



RL200



RX300

Telemetry Units -----

Expansion Units -----