APPLICATIONS
- Automated weather stations
- Real-time environmental monitoring & soil moisture tracking
- Frost protection
- Real-time irrigation control
- Remote equipment monitoring and control
- Motor and pump auto-start/stop applications

FEATURES
- One Antenna (type varies by configuration)
- Secondary antenna port
- Integrated solar panel
- One 12 volt, 2000mAh rechargeable battery
- Modem (type varies by configuration)
- Three status LEDs
- Ports: 1 sensor port, 1 RS232 port, 1 RS485/SDI-12 port
- Two port expansion slots
- 3/4" mounting pipe

SPECIFICATIONS

Cellular Configurations
Modes: GSM/2G/GPRS (EUR)
CDMA/Verizon (USA)
LTE-M1/Verizon (USA) - GSM/3G/HSPA/Telstra (INT.)
Antenna Type: Fixed mount heavy duty pentaband

WiFi Configurations
Modes: WiFi 802.11b/g/n
Security : WPA-PSK, WPA2-PSK, WEP 13 channels
Transmit Power: Up to +16 dBm, +13 dBm (EUR/AUS/BRA)
Sensitivity: -93 to -71 dBm
Antenna Type: N-type connector with outdoor grade plastic/
rubber antenna

Local Area/Mesh Radio Configurations
Modes: 915MHz, -24dBm, 250mW (USA, AUS, CAN, BRA, SGP, and MEX)
915MHz, -20 to -30dBm, 100mW to 1W (USA, AUS, CAN)
868MHz, -13dBm, 20mW (EUR)
Antenna Type: N-type connector with outdoor grade metal antenna
Typical Range: 0.5 to 1 miles depending on topography, radio, and antenna type

Power
Solar Panel / Wall Charger: 5W (wall charger sold separately)
Charge Regulation: PWM built-in
Internal Battery: 12V NiMH, 2Ah (upgradable to 4Ah)
Typical Run Time: Up to 1 week without sunlight

Communications & Input Ports

PORT	SIGNAL TYPE	TYPICAL USE
6	Serial communications - RS-485 (ASCII Modbus RTU) or SDI-12	RX300-485 expansion unit Soil moisture probes Modbus RTU-enabled variable speed drives
8	Serial communications - RS-232	RX300 expansion unit Flow meter optical reader
5.1	Digital Counter (0-10Hz)	Flow meter
5.2	Frequency input (0-10kHz) Analog (0-5V DC or I2C compatible)	RX30-WS weather station
Connectors	Unless specified otherwise, all input and communication ports utilize SwitchCraft/Conxall Micro-Con connectors.	

Expansion Options

PORT	SIGNAL TYPE	TYPICAL USE
1-4	Optional expansion boards (two ports per board) support additional sensors or valve controls.	
6	Can connect to multiple RS-485 devices such as the RX300 expansion unit, which provides four additional sensor/control ports.	
8	Can connect to one RS-232 device such as an RX300 expansion unit, camera, flow meter, or optical reader.	

Hardware
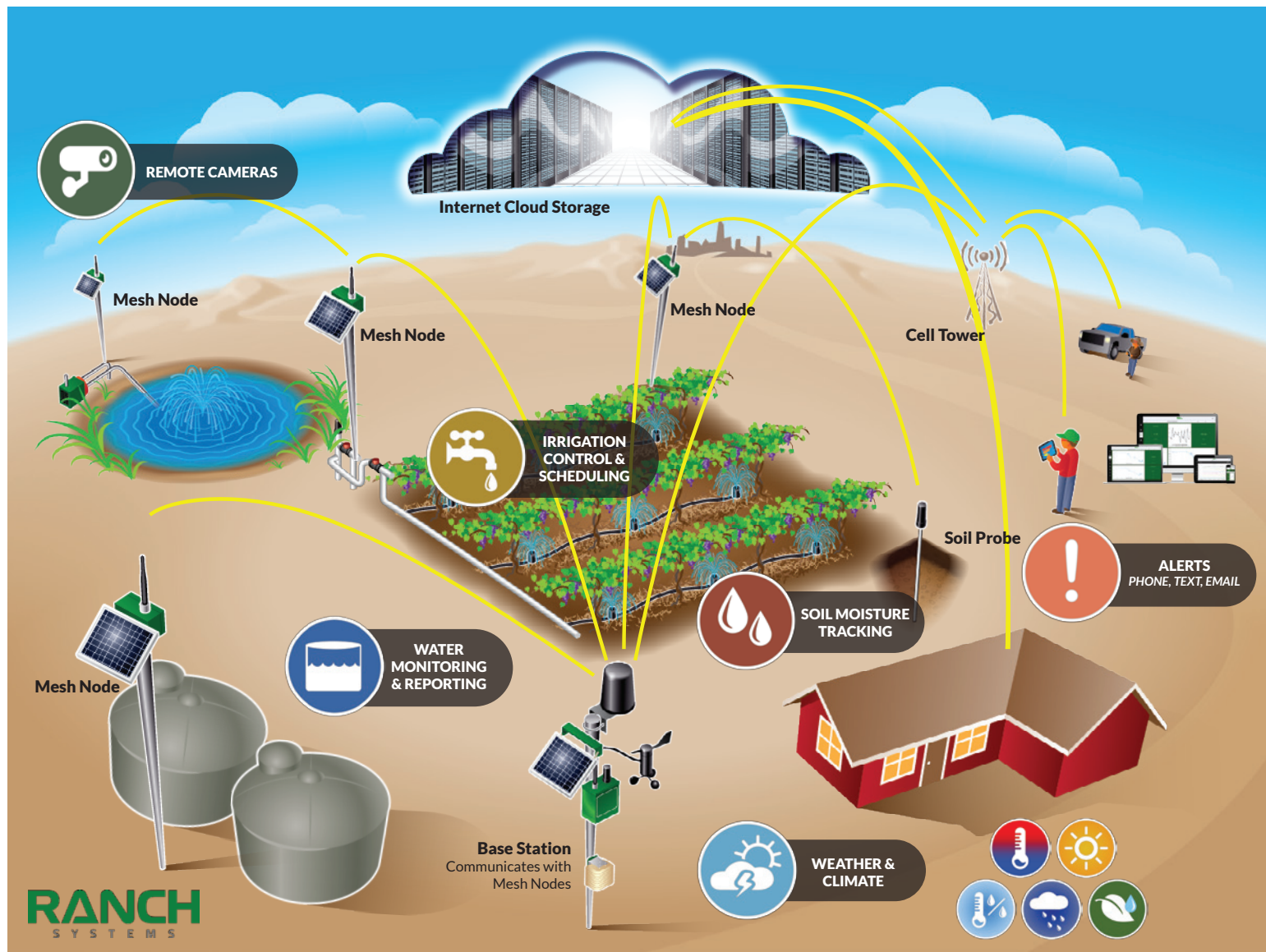Operating Temperature: -40°F to 185°F (-40°C to 85°C)
Dimensions (H x W x D): 4 x 10 x 4 inches (10 x 25 x 10 cm)
Weight: 7 lbs

RANCH NETWORK MAP

- REMOTE CAMERAS
- Internet Cloud Storage
- Mesh Node
- Mesh Node
- Mesh Node
- Cell Tower
- IRRIGATION CONTROL & SCHEDULING
- Soil Probe
- ALERTS *PHONE, TEXT, EMAIL*
- Mesh Node
- WATER MONITORING & REPORTING
- SOIL MOISTURE TRACKING
- Base Station *Communicates with Mesh Nodes*
- WEATHER & CLIMATE

RANCH SYSTEMS

UNITS

| RS130 | RM210 | RS300 | RL200 | RX300 |

Telemetry Units --   Expansion Units --