FEATURES

Future proof hardware with a modular design allowing technology switching, hardware, firmware and software upgrades at reduced cost and limited interruption to ongoing services.

Expand system with ease using off the shelf modules to add inputs, outputs and local communication capability to existing device.

Very little in the market place that cannot be connected to and controlled remotely through the Parrot range and its accompanying internet based monitoring and control system.

Connect multiple devices to the self healing mesh network, if a single unit fails, the system can maintain communications for all other units by finding alternative routes through the network

Parrot 4 & 8 Channel Stand Alone & Gateway

ZIGBEE, 4G LTE-M / NB-IOT or SATELLITE

OVERVIEW

High powered multi channel datanode that can measure multiple parameters at once, control and monitor pumps and a variety of other inputs

APPLICATIONS

Tank and channel level monitoring
Weather station or weather sensors
Soil moisture
Flow meter, pressure sensor, flow switch
Pump control – electric or diesel
Solenoid control
Water quality sensors
Irrigation control and scheduling

TECHNICAL DETAILS

The Parrot range is a modular electronic control system consisting of a connection board that accepts a series of input, output, communication and specialist modules together with a main processor, solar charger and voltage regulator. This system also utilises modules for local radio communication and allows for existing and new data transport carriers (cellular, satellite and LAN). Field hardware is supported via an IP connection to the Yabby API and is presented in a clear User Interface. Clients can securely log into their network via the internet to monitor and control connected devices.

Parrot systems can be configured as Standalone systems, Gateways, Field Nodes and Radio Nodes. The format of the connected equipment is limited only by the number of available ports and the types of I/O modules required. The current selection of I/O modules covers most common types of sensors, controllable field devices and industrial communication protocols like SDI-12 and ModBus. Specialist modules are available or under development to operate linear actuators, motorised positioning systems and a number of other devices.

The system uses radio communication as the backbone of a local wireless network. This network links to the internet via a Gateway utilising a selection of data transport carriers including 3G, 4G (LTE Cat M1 and NBIoT). The modular design allows us to integrate other data transport carriers such as Satellite and IP over LAN without substantial equipment replacement. Advances in cellular mobile, satellite and radio communication systems such as 5G, WiFi, ZigBee, SigFox, LoRa and others can be more easily and cost effectively integrated into existing equipment networks. The design is intended to provide a high level of future proofing so that clients can cost effectively move with technology changes.

In conjunction with other electrical equipment there is very little in the market place that cannot be connected to and controlled remotely through the range and its accompanying internet based monitoring and control system.

SYSTEM DETAILS

Cost Effective Telemetry Upgradability
The existing Data Node radio network is modular and can therefore be unplugged and replaced. This allows us to alter the backbone of the local area network (LAN) over time and allows clients to cost-effectively take advantage of changing technology

Self-Healing Mesh Technology
Our existing Zigbee radio frequency LAN can consist of various nodes all communicating with each other and to a Gateway connected to the internet. If a single DN failure occurs, the system can maintain communications for all other units by finding other routes through the network

Output control
This configuration allows users to automatically or manually switch connected devices such as pumps and irrigation equipment, or any electrically switchable operating system for light industrial
clients

Realtime Interaction
Update rates can be altered in the web interface where clients have a specific need to improve the "realtime" response of the system

Alerts
Notifications are available via any or all of the web interface, email, and SMS. The most common alert is triggered by a set point at the device level. This is sufficient for notifications such as tank low level, exceeding flow rate, high pressure, no flow, high wind speed etc

Installation
The system is supplied with a main board, modem, radio, solar panel, battery holder and battery or batteries.

The 4 Channel Parrot is supplied with an enclosure and mounting brackets. However the 8 Channel Parrot does not include the mounts as the mounting option required will depend on the nature of the installation.

Plug in modules for required solutions are additional.

Antennas are separate as the appropriate antenna will be based on transmission distances required.
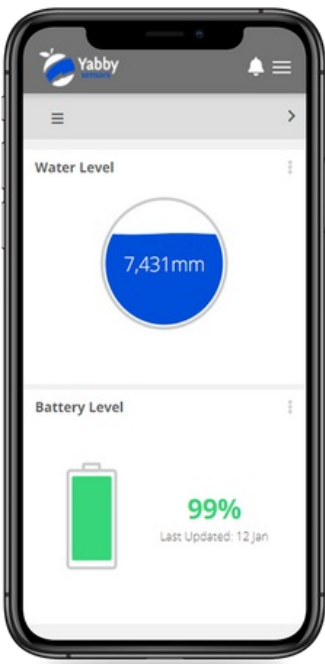
FEATURES

Monitor environmental sensors and device locations and parameters

Configure sample rates, device outputs and variable alerts

Control device outputs such as pumps, valves and gates

Receive SMS or email alerts based on variable thresholds

Download device data as csv files and images

Yabby Platform

OVERVIEW

Yabby sensors are remotely monitored with our custom cloud based platform. Interrogate volume and level trends, change sampling intervals and set SMS and email alerts. Our platform is flexible and modular meaning we can set it up the way you like from our library of maps, charts, gauges and controls.

OTHER SERVICES

- Integrate other sensors to our platform
- White label the platform with your company branding
- Send your sensor data to third party platforms