



Smart Network Technology

NetSense probes are designed and built with the most efficient technology available for remote site applications.

NetSense probes can be built to specification using the base architecture (**Table 1**) coupled with the optional features (**Table 2**) offering scalability and flexibility.

NetSense probes utilise a client server architecture – leveraging a powerful backend application server with full database and reporting functionality, and the probes' own intelligent operating system, enabling the business to reduce onsite human resource requirements.

Key Features:

- Small UMPC footprint, rugged case
- Remote access and control
- Event correlation and alerting
- Communications network monitoring and management
- Data collection/storage and forwarding
- Environmental monitoring and management
- Location and RFID reporting
- Automated instruction
- Network connectivity and security
- UPS monitoring and management
- Media converter monitoring and management
- Centralised control

Table 1: Base Model

CPU	500Mhz
RAM	256MB
Serial Ports	1 x serial DB 9 for IO data collection
Ethernet	2 x 10/100Mbps IO LAN
USB	2 x USB
WWAN & GPS	Quad-band 3G modem interface with GPS
Storage	Compact Flash
Power	DC power jack with power sensor
Operating System	NetSense command line on Linux shell

Table 2: Options

Serial Ports	4x Serial Ports
Power Relay	RJ45 power management port
Bluetooth	Optional USB or built-in
Power modification	Rugged adapters or modified ports
USB	4 x USB or Serial ports
Wireless 868mhz	868Mhz wireless (low speed high range WLAN) for RFID
WLAN	2.4/5Ghz WLAN
Battery backup	Lithium cell up to 2 hours
Sensor interfaces System	1 wire bus for temperature, humidity, pressure, current

Common Applications

NetSense probes can be utilised in almost any remote environment to automate and streamline your business and communications functions.

Network Connection Monitoring

Probes installed at remote sites can monitor mission critical network connections and alert immediately when faults are detected.

With 3G mobile connectivity, diagnostic information and alerts can be sent even if the primary network connection to the site is down.

Environment Sensor Monitoring

NetSense Probes can be configured to monitor telemetry from a variety of sensors including electrical current, temperature and humidity.

Network 3G WAN Gateway

The G2 probe can be used as a mobile gateway to connect remote sites or as a backup to your main link

Remote Site Access & Security

NetSense Probes can provide remote access and control to a wide variety of devices via standard USB or Serial interfaces.

NetSense smart devices only allow dial out function for security purposes – NetSense smart OS enables “triggered” dialup to occur or “always on” link, to meet application requirements.

Secure network connections can also be established using standard networking protocols to route and encrypt traffic

Functions

Network Connectivity	Ethernet and mobile wireless client/server model – to server application.
Monitoring functions	IP poll, SNMP, serial, power, temp, humidity, other devices
Alarms and notification	via mobile communication to server database, Syslog, SMS, SNMP
Other functions	Remote power resets, local device terminal access, remote control
Telemetry	Data collection store and forward with environmental monitoring options
Location and ID	RFID and GPS built in for logistical applications
Server Applications	Client-Server data store and retrieval application
Network Gateway	Mobile Gateway, static routes, GRE tunnel, NAT, RIP v2
Management and access	Via NetSense server application, Telnet, Web front end administration

For more information, please email:
info@tng.co.nz