6944 Industrial 4G Wi-Fi Router

6944 Industrial 4G Wi-Fi Router – Key Features

The 6944 is an Industrial 4G / LTE Wi-Fi Router with Dual SIMs which can route via its SIM cards, Ethernet WAN, or via its Wi-Fi to other 6944's or third party routers, providing a highly resilient network. The 6944 supports VRRP, a number of VPN Technologies such as Open VPN, IP Sec, L2TP etc. and has support for MODBUS and DNP. The 6944 is also available with a GPS Option.
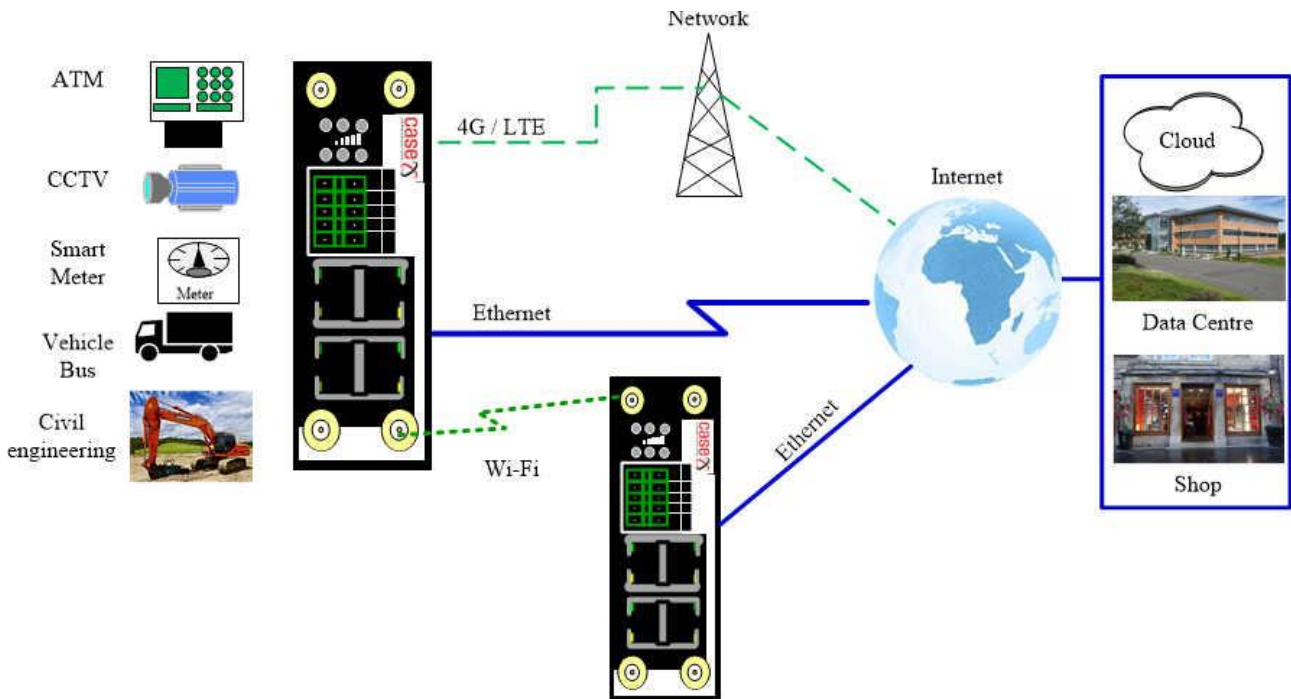
Features

- The 6944 is a dual SIM 4G LTE Industrial M2M Router
- 4 x 10/100Mbps Ethernet Ports
- 2 x 2 MIMO (Multiple Input, Multiple Output) 300Mbps Meshed Wireless
- IEEE 802.11b/g/n Access Point (AP)
- RS232 / RS485 Serial Ports with TCP Client
- L2TP Client and Server
- PPTP Server / Client
- SMS Control
- SMS Gateway and notification
- 2 Digital Inputs, 2 Digital Outputs
- Static and Dynamic Routing
- Tunnelling – GRE, Open VPN and IP Sec
- Operating Temperature -40C ~ +75C
- VRRP (Virtual Router Redundancy Protocol)
- GPS (Global Positioning System) Option
- Digital Input, Digital Output

- IEC101 to IEC 104

- MODBUS to DNP3

- DMVPN with RIP, OSPF, BGP

Introduction to Case Communications Industrial 4G Wi-Fi Router

The Case Communications 6944 is a Dual SIM 4G LTE Industrial M2M Router The 6944 is equipped with Dual 4G SIMS and 300Mbps Mesh Wi-Fi , digital Input / output ports and support for both MODBUS master and MODBUS Slave. The Case Communications 6944 is a high performance industrial cellular router designed to operate in harsh conditions from -40C to +75C. This allows the 6944 to operate reliably in the most difficult of locations.

Ethernet Ports

Supplied with 4 x 10/100Mbps Ethernet ports the 6944 Industrial Router can either use all 4 Ethernet ports as LAN Ports or it can use 3 Ethernet ports as LAN Ports and 1 Ethernet Port as an 'Ethernet WAN' Port, providing an additional route out of the 6944.

300Mbps MIMO Wi-Fi

The Case 6944 Router comes with with dual MIMO antenna providing 300Mbps over the Wi-Fi using well known standards IEEE 802.11b/g/n Wi-Fi. This allows the 6944 to act as an Access Point or to connect to other 6944's via the Wi-Fi link. When meshed to other 6944 routers the 6944 can use the Wi-Fi as another alternate route.
This allows true meshed network and true non-stop networking.

VRRP (Virtual Router Redundancy Protocol)

For the ultimate in resilience the 6944 is supports V.R.R.P (Virtual Router Redundancy Protocol) This is a computer networking protocol that provides automatic assignment of available Internet Protocol (IP) routers for participating hosts. The V.R.R.P router that has the highest number will become the virtual master router. This means other routers can automatically take over in the event or a router failure. The 6944 can use VRRP with other 6944 routers as well as with Cisco routers

SMS Control

The 6944 supports an SMS feature which allows network managers to send an SMS to monitor or control the 6944 router or get the operational status of the router.

6944 with GPS

The 6944 has the option of a GPS module.

Serial Ports

To provide support for SCADA / MODBUS systems the 6944 is equipped with both an RS232 and RS485 ports allowing connection to industrial control systems.

6944 Industrial Router Specifications

SPECIFICATIONS	
Cellular	
Cellular Frequency Bands	4G (LTE) Aus & NZ: B1/B2/B3/B4/B5/B7/B28/B40 EMEA: B1/B3/B5/B7/B8/B20/B38/B40/B41 America: B2/B4/B12/B13
SIM	2 x SIM Slots 1.8v/3V Auto-Switch on: Data Limit, SMS Limit, Network failure, Network denied, Connection failure
Auto-APN List	Operator APN List
Mobile Quota Control	The Network Manager can set up custom data limits for both SIM cards
Number of Antenna	2 (Main and Aux) with SMA female connectors
Digital Input & Output	
Type	2 Digital Inputs 2 Digital Outputs
Connector	Terminal Block
Isolation	3KVDC or 2KVrms
Absolute Maximum	36vdc
Absolute Maximum	100ma
Virtual Private Networks	

Open VPN	Support for up to 5 x OpenVpn Tunnels
IP Sec	IKEv1, IKEv2, supports up to 5 IP Sec Tunnels
GRE	Layer 2 and Layer 3, supports up to 5 x GRE VPN Tunnels
DMVPN	Dynamic Multipoint Virtual Private Networking

Monitoring & Management

Logon Security	Supports 802.1X RADIUS Server
Web GUI	HTTP / HTTPS, firmware upgrade
Command Line Interface	SSHv2 & Telnet
SNMP	SNMPv1, v2, v3 SNMP Traps

SPECIFICATIONS

Ethernet

Number of Ports	4 x 10/100Tx Ports
Port Types	Auto 10/100 Mbps, Auto MDI / MDIX
Isolation Protection	1.5KV

Wi-Fi

Wi-Fi Mode	IEEE 802.11b/g/n Access Point (AP), Client
Wi-Fi Data Rate	2 x 2 MIMO, 300Mbps
Wireless Security	WPA, WPA2, WEP, CCMP, TKIP
Frequency Bands	2.412 - 2.484 Ghz (2.4Ghz ISM Band)
Antennas	2 x RP-SMA for Wi-Fi Antenna Connectors

Serial

Number of Ports	1 x RS232 (3 Pin) + 1 x RS485
Connector	Terminal Block

ESD Protection	+ / - 15KV
Bit Rate	300 bps to 115200 bps

Networking

Routing	Static, Dynamic (RIPv1 / v2) OSPF, BGP
Network Protocols	TCP, UDP, IPv4, ICMP, NTP, HTTPS< ARP, VRRP, PPP, PPPoE, DHCP
Manager Diagnostics	Ping Detection, Timer Reboot, ICMP for link detection
DHCP	Static & Dynamic IP Address allocation
DDNS	Automatic and Manual Configuration
Network Resilience	Dual SIM, Ethernet WAN, WI-Fi, VRRP
Firewall	Flexible Access Control of TCP, UDP, ICMP Packets, MAC Address Filtering
SMS	SMS Configuration, SMS gateway, SMS Notification

HARDWARE SPECIFICATIONS

Power

Input Voltage	9 ~ 48vdc
Power Consumption	Data Link Active: 400mA(Peak) @12vdc Data Link Idle: 100Ma @ 12vdc
Connector	3 Pin, 3.5mm female socket with lock

Hardware Resilience

Watchdog Timer	Builtin watchdog timer
Reset Button	Reset / restore to factory default
LEDS	System, Network, USR, RSSI x 3

Housing and Physical

Ingress Protection	IP 30

Housing and Weight	Metal: 300 gms
Dimensions	106mm x 106mm x 40mm
Installation	DIN - Rail Mounting

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	- 40C to +75C
Operating Humidity	5% to 95% non-condensing

APPROVALS

EMI	EN 55032:2012 Class B
	IEC 61000-4-2 ESD: Level 4
	IEC 61000-4-3 RS: Level 3
	IEC 61000-4-4 EFT: Level 3
	IEC 61000-4-5 Surge: Level 3
	IEC 61000-4-6 CS: Level 3
Vibration	EN 50155