Lantech Multifunction Routers

Industrial / EN50155 Multifunction VPN Routers w/ Load Balancing, VPN, Protocol Gateway, Storage, etc.

OVERVIEW

Lantech's next generation industrial / EN50155 multi-function VPN router supports advanced function of VPN, Load-Balancing, EMMC Flash Storage**, Protocol gateway (Modbus), Storage**, Wi-Fi roaming and LTE quad SIM fail-over for industrial applications.

Load Balancing with 5 mechanisms for multi-WANs

The router supports Load Balancing for LTE/WAN connections. There are five schemes for Load Balancing function:

Pack	Algorithm	Description
Basic	Fixed	All traffic will be distributed to a single WAN.
	Failover	Routes connections through preferred WAN link while others stand-by. Sequentially activating another link if the preferred link fails.
	Priority	Select the active WAN according to priority.
	Weighted Round-Robin	Evenly distribute the traffic over all working WAN links in circular order according to the specified weights.
	Custom Route	Routing through the selected WAN for each specific traffic, ex: TCP/UDP port number and IP address.

Serial ports connection with Modbus gateway

For the router that builds in serial ports connection, the built-in Modbus gateway can convert Modbus RTU/ASCII to Modbus TCP for device control.

VPN and firewall

Besides traditional VPN peer to peer tunneling, the router supports latest Multi-Site VPN function that is an efficient way for Mesh tunneling. The registration is under cloud service and encrypted by SSH makes the connection easy and safe. It supports Multi-Site VPN, OpenVPN, L2TP over IPsec, IPsec, L2 over GRE, IPGRE, and NAT for various VPN applications. The built-in Layer-4 firewall includes DDoS, IP address filter / Mac address filter / TCP / UDP port number.

Support routing protocol: Static route / RIPv2 / OSPF / BGP / EIGRP

Lantech router series supports two routing methods: static routing and dynamic routing. Dynamic routing makes use of RIPv2, OSPF, EIGRP and BGP. The user can either choose one routing method to establish the routing table.

Remote Web control

When the router is at remote area with limited access, Web control can help to get router status or remotely reboot.

Environmental monitoring for inside router info& alerting; Graphic WIFI & LTE signal strength

The built-in environmental monitoring can detect router ambient temperature, voltage, current and total PoE load where can send the SNMP traps Syslog and email when abnormal. The graphic WIFI & LTE signal strength shows connection status at a glance

Built-in managed switch function

Managed switch function is built-in and provides various L2+ functions for network aggregation deployment. It delivers ports and PoE management, VLAN, QoS, multicast, redundant ring, and security functions.

USB port for back up, restore configuration and upgrade firmware; Dual image firmware

The built-in USB port can upload/download the firmware through USB dongle for router replacement. It support dual-image firmware to choose which one to start.

Editable login page of captive portal

The router supports editable captive portal function that allows administrator to force end-users redirect to authentication page.

Optional EMMC flash storage**

The optional EMMC flash storage on the router can offer 8G/16G/32G capacity.

Support AP/Bridge/Client mode, Mesh roaming (Wi-Fi-supported models)

The router supports AP/Bridge/Client mode for different applications. It also supports client-base roaming to swap between the APs in a network.

Built-in wireless Mesh network (WMN) (Wi-Fi-supported models)

The router supports Mesh network composed of different nodes. The set of SSIDs allow the wireless client to roam freely without the need for complicated account management. With Mesh protocol, it can provide a reliable, scalable, stable and seamless network topology.

IEEE 802.11ac dual band radio up to 2.6Gbps bandwidth (Wi-Fi-supported models)

With IEEE 802.11ac capability, the router can operate either 5GHz or 2.4GHz bands, offering the maximum speed of 2.6Gbps bandwidth (1.3Gbps per 1AC). It is also compatible with 802.11b/g/n that can work with 2.4GHz for longer range transmission. The Wi-Fi 11ac supports AP/ Bridge/ AP Client modes can be diverse for most of wireless application. Working with load-Balancing “Priority” mode, the AP client can enable router to transmit on Wi-Fi with first priority.

Wireless WMM QoS (Wi-Fi-supported models)

The router supports 802.11e standard which defines a set of Quality of Service for wireless LAN applications as well as WMM (WIFI multimedia).

Advanced security & 16 SSIDs (Wi-Fi-supported models)

The security support standards including 64/128bits WEP, WPA/WPA2 PSK (TKIP, AES), 802.1x ensures the best

security and active defense against security treads. The router supports up to 16 SSIDs, each SSID has its independent security and encryption.

Optional eSIM** (LTE-supported models)

By replacing physical SIM, optional eSIM chip will allow users to purchase data plans at low prices from local carriers in the world.

SPECIFICATIONS

WLAN Interface (Wi-Fi-supported models)	
Wireless Standard	IEEE 802.11ac/n/a 5GHz IEEE 802.11b/g/n 2.4GHz
Operation Mode	Supports AP/ Bridge/ Client/ MESH modes
Wireless bandwidth	5GHz: Up to 1300Mbps 2.4GHz: Up to 450Mbps
Bandwidths	20MHz, 40MHz, 80MHz
Encryption Security	WEP : (64-bit ,128-bit key supported) WPA /WPA2 : IEEE802.11i(WEP and AES encryption) WPA-PSK (256-bit key pre-shared key supported) EAP-TLS,EAP-TTLS, and PEAP
Wireless Security	SSID broadcast disable
MESH	Support 802.11s Wireless Mesh Network
Authentication	Radius Authentication, EAP-TLS, EAP-TTLS, PEAP; SSID broadcast disable supported
SSID	16 sets
Login Security	Supports IEEE802.1x Authentication/RADIUS
Roaming	Client-base roaming
WAN Interface	
Option Interface	PPPoE, Wi-Fi WAN (Wi-Fi-supported models), LTE (LTE-supported models), Eth WAN
WAN Settings	WAN 1~5
Cellular (LTE-supported models)	Select SIM 1/2, Alive Detect Condition auto/ping/signal, 3G/4G, Cellular History log
Software	
Internet Protocol	IPv6, IPv4
WMM	WIFI multimedia and 802.11e traffic prioritization (Wi-Fi-supported models)
VPN	Multi-site VPN, Open VPN, L2TP over IPSec, IPSec, L2 over GRE, IPGRE and
	NAT
Firewall	DDoS, IP address filter / Mac address filter / TCP/UDP port number.
Access Security	HTTP/HTTPS/Telnet/SSH & Administration; SNMP v1/v2/v3 access for authentication via MD5/SHA(v3) and Encryption via DES/AES(v3)
Protocol	DHCP server/client, Adjustable MTU, Port forwarding , DMZ; NAT, SNTP, VRRP, DDNS
Routing	Static route / RIPv2 / OSPF / BGP / EIGRP
Switching Function	Port Rate Limiting, Power over Ethernet, 802.1Q VLAN, IEEE 802.1p QoS, IGMP, RSTP, MSTP, G.8032 ERPS, MAC Address Tables
Protocol Gateway	Modbus on serial ports (Built-in serial ports models)
Management	SNMP v1,v2c,v3/ Web/Telnet/CLI
Environmental Monitoring	System status for input voltage, current , ambient temperature to be shown in GUI and sent alerting if any abnormal status
Graphic signal display	Graphic WIFI & LTE signal strength & TX/RX rate display
Timer	Built-in Real Time Clock to keep track of time always(RTC)
Discovery	IEEE 802.1ab Link Layer Discovery Protocol (LLDP)
SNMP trap	Device cold / warm start Port link up / link down DI/DO high / low
Remote Web control	To reboot or get status of router by Web UI
Captive portal	Editable captive portal login page
Maintenance	Firmware upgradeable through TFTP/ HTTP
Configuration backup & restore	Supports text configuration file for system quick installation USB port to upload/download firmware by USB dongle
Load Balancing (Basic)	
Fixed	All traffic will be distributed to a single

	WAN.
Failover	Routes connections through preferred WAN link while others stand-by. Sequentially activating another link if the preferred link fails.
Priority	Select the active WAN according to priority.
Weighted	Evenly distribute the traffic over all
Round-Robin	working WAN links in circular order according to the specified weights
Custom Route	Routing through the selected WAN for each specific traffic ex: TCP/UDP port number and IP address.

*Future release

**Optional

OPTIONAL ACCESSORIES

Management System

- **InstaAir……..…….....P/N: 9000-121**
  Cloud Based Fleet Management System for Routers

Lantech Communications Global Inc.
www.lantechcom.tw
info@lantechcom.tw