LUCEOR

MINIMESH-MAX

MiniMesh-Max is a HyMesh industrial indoor CPE that combines 5G and WiMesh (Wi-Fi6 based) to deliver high-speed data transmission for video and other bandwidth-intensive applications.

Infused with our LuceorOS operating system, it can relay data through the best available path and switch optimally between WiMesh and 5G to ensure uninterrupted connectivity at a minimum operating cost. It is an ideal choice for manufacturing, surveillance, and other industrial applications.

MiniMesh-max is equipped with a cellular interface, Wi-Fi interface, GNSS interface, four Gigabit Ethernet ports, USB3.1 interface, and two serial ports to provide flexibility and versatility

WIMESH

5GNR/LTE/WCDMA

INDOOR ROUTER

KEY FEATURES

1 x 2x2 MIMO 802.11ax radio transceiver

1 x 4x4 MIMO 5G NR and LTE-A CAT20 dual mode

Wide range of external MIMO antennas

4 x 10/100/1000Mbps Ethernet ports

LuceorOS manages network traffic by dynamically and intelligently selecting the best connection

Automatic and optimum switching between WiMesh and 5G/LTE to ensure reliable connectivity

Web, TR069 and SNMP based device management

Plug-and-Play installation

Indoor Applications

3D VIEWS

HARDWARE SPECIFICATIONS

Technical standard	WAN	5G NR/LTE/WCDMA/HSPA+		
	LAN	IEEE 802.3/802.3u		
Cellular	Frequency Bands	AE Version	5G NR	n1/n28/n41/n77/n78/n79
			LTE	B1/B2/B3/B5//B7/B8/B20/B25/B28/B34/B39/B40/B41
			WCDMA	B1/B2/B4/B5/B8
		NA Version	5G NR	n2/n5/n12/n25/n41/n66/n71/n78
			LTE	B2/B4/B5/B7/B12/B13/B14/B17/B25/B26/B29/B30/B41/B42/B48/B66/B71
			WCDMA	B1/B2/B4/B5/B8

Carrier Aggregation	LTE	3CA and UL CA		
	NR	2CA (available for software upgrade)		
Max. RF TX Power	5G NR sub 6 bands	Class 3 - 23dBm		
	5G NR n41/n77/n78/n79	Class 2 - 26dBm		
	4G LTE	Class 3 - 23dBm		
	WCDMA	Class 3 - 23dBm		
Max. Data Rate	Downlink	5G NR (Gigabit Ethernet port)	930 Mbps	
		4G LTE (Gigabit Ethernet port)	930 Mbps	
	Uplink	5G NR SA Sub 6	900 Mbps	
		5G NR NSA Sub 6	650 Mbps	
		4G LTE	200 Mbps	
		WCDMA	5.76 Mbps	

WLAN	2x2 MIMO 802.11ax radio transceiver
Navigation	GPS
Antenna Ports	4 x SMA connector for Cellular 2 x SMA connector for 2.4&5GHz Wi-Fi/WiMesh antenna
External Ports	4 x RJ45 gigabit Ethernet ports 2 x SIM slots (4FF, dual SIM single standby) 2 x DI/DO ports for RS485/RS232 1 x USB 3.1
LED Indicators	1 x Power indicator 1 x Network status indicator 1 x SIM indicator 3 x Signal strength indicators
Button	1 x reboot or restore button
Power Supply	12V ~ 36 VDC
Power Consumption[1]	< 24 W
Dimensions	187 mm x 110 mm x 51.5 mm 7.36 in x 4.33 in x 2.03 in
Weight	< 1 Kg < 2.2 lb.
Temperature	Operating temperature: -10 °C ~ 45 °C | 14 °F ~ 113 °F Storage temperature: -40 °C ~ 70 °C | -40 °F ~ 158 °F
Humidity	5% - 95%

[1]Power consumption depends on transceiver configuration

SOFTWARE SPECIFICATIONS

Data Services	4 x APNs (2 for data, 1 for voice, 1 for management)
	Multiple PDN (up to 16 PDNs)
	IPV4/IPV6 compliance
LAN	IEEE 802.1Q VLAN
	DHCPV4/ DHCPV6 server/ client
	DNS and DNS proxy

	DMZ	
	UPNP	
	ALG	
	Multi-cast/ Multi-cast proxy	
	MAC address filtering	
	GPS broadcast to LAN	
Management	Version Management	Image checksum
		Active version and backup version
		Rollback mechanism when upgrade fails
	HTTP/FTP auto-upgrade	
	TR069	Upload/ Download the ACS specified file
		Download the configuration file
		Configure & queries parameters
		Remote upgrade
		Remote debugging operations
		Cycle monitor
	SNMP	
	WebGUI/ CLI	Various level of user login priority with different limitation and display
		Encryption backup current settings and restore the backup settings
		Export current diagnosis results and operation logs
		Statistics of LAN link status, transmit and receive traffic and up time
	Diagnostics	
	USIM PIN management and card authentication	
	USIM activation	
VPN & Routing	Route mode	
	Bridge mode/ Bypass mode	
	NAT mode	
	Static mode	
	Port mirror	
	ARP	
	IPV4/IPV6 dual stack	
	Port forwarding	
	IPSec	
	PPTP	
	GRE tunnel	
	L2TP V2/V3	
	VPN pass-through	

Security	Firewall
	Mac address filtering
	IP address filtering
	URL filtering
	Access control
	HTTPS login from WAN
	DDOS attack protection
	Hierarchical user management

COMPLIANCE CERTIFICATIONS

FCC/CE	
Protection rating	EN60529:IP67
Salt mist	IEC68-2-11
Shock	IEC60068-2-27/EN50155/EN61373
Free Fall	IEC60068-2-32 (1 meter height with package)
Vibration	IEC60068-2-6/EN50155/EN61373

ORDERING INFORMATION

IWR-1000AX-5G	MiniMesh-MAX with one 5GHz, 2x2 MIMO, 802.11ax and one 5G NR and LTE-A CAT20 dual mode, 4x4 MIMO transceivers