

# I(P)MR-3004DF

**Industrial Multifunction VPN Router Managed Ethernet switch w/up to 2 LTE 4G + 2 serial ports + 4 Gigabit Ethernet (incl. 4 PoE) + 2 WAN dual speed SFP w/ Load Balancing, VPN, Storage\*\*; 24V input**

- Up to 2 concurrent mobility for 3G/4G LTE Link&GPS (2L model/4 SIMs)
- Support LTE Cat 6 (APAC & EUNA models) or Cat 12/9/13 (WW model)
- Built-in 4 Gigabit + 2 WAN Dual Speed SFP managed switch
- PoE model including 4 PoE at/af w/budget 80W
- Managed Switch functions cover port management, QOS, VLAN, multicast, redundant ring and security function
- VPN router for Multi-site VPN, OpenVPN, L2TP over IPsec, IPsec, L2 over GRE, IPGRE
- Load Balancing built-in 5 mechanism
- Optional EMMC Flash storage on-board\*\*
- Support NAT and Firewall
- Support 2 RS422/RS485 ports or 2 RS232 ports
- Dual input voltage 9~56VDC (24V model)
- Vehicle E-marking\*\* certificate
- Environmental monitoring for router inside info with voltage, current, temperature and total POE load; LTE graphic signal strength
- Editable login page of captive portal for hot-spot application
- Optional eSIM chip enables router with versatile data plans\*\*
- Dual image firmware



## OVERVIEW

Lantech I(P)MR-3004DF series is a next generation industrial multi-function VPN router w/up to 2x LTE modem + 4x Gigabit Ethernet ports incl. 4 PoE ports (PoE model) + 2 WAN dual speed SFP+ 2 serial ports that supports advanced function of VPN, Load-Balancing, EMMC Flash Storage\*\*, Protocol gateway (Modbus), and LTE quad SIM fail-over for industrial applications. The dual core CPU with 1.6GHz + 256M flash enables the router to multi-task smoothly.

### Dual concurrent LTE design 4G/3G for load-balancing

With dual LTE module design (2L model), 4 SIM card slots, I(P)MR-3004DF can allow auto-swap, failover & failback between multiple service providers for real non-stop connection. With concurrent LTE modules, it can also allocate bandwidth by "Load Balancing with 8 schemes between multiple WANs.

With one mobile LTE module (1L model), 2 SIM card slots, I(P)MR-3004DF provides redundant link between two service providers.

Both GPS and Russian GLONASS systems are supported.

### Optional EMMC Flash storage\*\*

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

### Load Balancing with 5 mechanisms for multi-WANs

I(P)MR-3004DF 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	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.

**2 port serial connection**

It builds in 2 port serial connection for RS232, RS422, RS485.

**Managed switch Function**

With port managed functions, QOS, VLAN, Multicast, Redundant protection, security

**VPN and firewall**

Besides traditional VPN peer to peer tunneling, I(P)MR-3004DF support 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.

**DIDO for alarm & email notice; Event log; Remote Web control**

2 sets of DIDO function can support additional high/low physical contact for designate applications besides Port / Power events, for example, DIDO function can trigger alarm if the router was moved or stolen. In case of events, the I(P)MR-3004DF will immediately send email and trap.

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

**Wide range input voltage from 9V-56VDC (24V Model); Built-in 4 port switch (PoE model including 4 PoE with 80W budget)**

The I(P)MR-3004DF is able to work from 9VDC to 56VDC (24V Model) and PoE model built-in PoE at/af with PoE budget 80W@12V /80W@24V that is particular good for vehicle, rail train, depot etc. application.

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

The built-in environmental monitoring can detect router ambient temperature, voltage, current and total PoE load where can send the syslog, email when abnormal.

**Built-in Managed Switch Function**

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

**Dual image firmware**

It supports dual-image firmware to choose which one to start.

**Optional eSIM\*\***

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

**Ruggedized industrial design and FCC, CE & E-marking\*\* certificate**

The I(P)MR-3004DF is designed to meet with industrial network environment with IP 30 housing. It passed serious tests under extensive Industrial EMI and environmental vibration and shocks standards.

With CE & FCC radio certification for LTE and E-marking\*\* certificate, the I(P)MR-3004DF is best for outdoor community, vehicle, process control automation etc application. For more usage flexibilities, I(P)MR-3004DF supports wide operating temperature from -40°C to 65°C.

**FEATURES & BENEFITS**

- Built-in 4 Gigabit + 2 WAN Dual Speed SFP Ethernet managed switch
- PoE model incl. 4 PoE at/af for PoE budget 80W
- Managed Ethernet switch Functions
- 6 SMA type connectors for LTE & GPS
- HTTP/HTTPS/Telnet/SSH & Administration access
- Support IPv6 & IPv4 protocol
- EMMC-FLASH storage\*\*8/16/32G
- eSIM\*\* to allow data-plan globally
- Radius Authentication, EAP-TLS, EAP-TTLS, PEAP
- Support Multi-Site VPN for mesh tunneling as well as Open VPN, L2TP over IPsec, IPsec, L2 over GRE , IPGRE and NAT for secured network connection
- Support Routing Protocol: Static route / RIPv2 / OSPF / BGP / EIGRP
- The built-in Layer-4 firewall includes DDoS, IP address filter / Mac address filter / TCP/UDP port number
- NAT/DMZ/Port Forwarding
- Support SNMP v1/v2c/v3
- Dual concurrent LTE 4G/3G design (2L model)for auto-swap/failover/failback between multiple ISPs for continuous service (four SIM card slots)

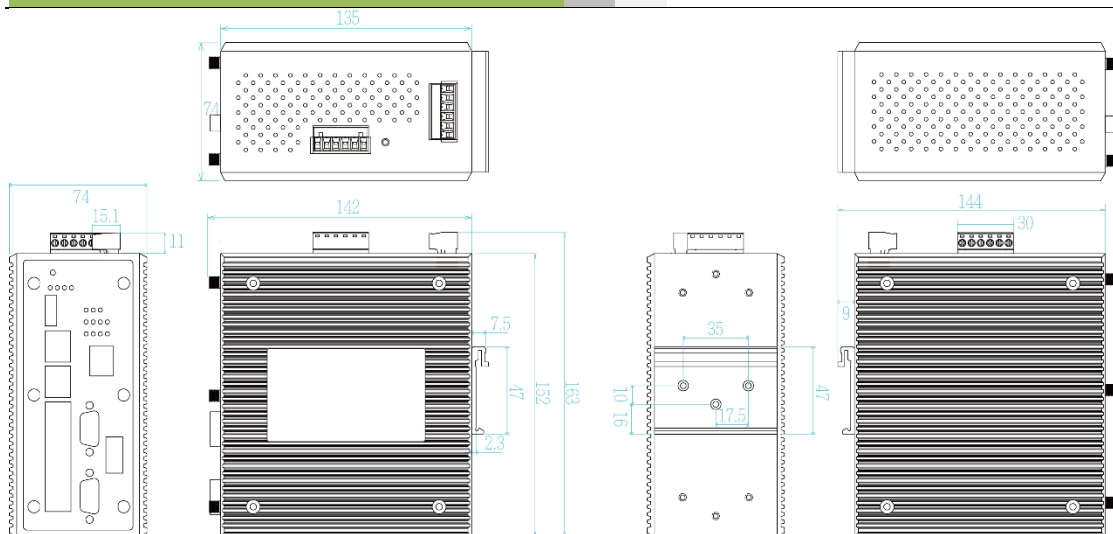
- One LTE 4G/3G w/ 2 SIM card design(1L model) for mobile redundancy
- GPS/ GLONASS (support by LTE module) connection
- Load Balancing supports 5 mechanism between multiple WANs

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.

- Supports 2DI / 2DO (Digital Input / Output)
- Event alerting by Syslog, SNMP Trap, Email, Relay ; Permanent local log rotation / Maxi 1K records
- Remote Web control to get status or re-boot by Web
- Graphic LTE signal strength
- Support SNTP to synchronize system clock
- Support LLDP discovery protocol
- Support DHCP Server and Client
- Built-in environmental monitoring for system input voltage, current and ambient temperature; Able to set alert when abnormal
- Dual image firmware to choose which to start
- Firmware upgradeable through TFTP/HTTP
- Configuration backup and restoration
  - Supports text configuration file for system quick installation
  - USB port to upload/download configuration by USB dongle
- Reset button for factory default mode
- IP 30 housing for industrial environment
- DIN-Rail and Wall-mount\*\* installation
- Operation temperature -40~65°C

- Built-in 2 x serial ports(RS232/RS422/RS485)

**DIMENSIONS (unit=mm)**



**SPECIFICATION**

Location Solutions	GPS, Glonass (EUNA/Americas) GPS, Glonass, Beidou, Galileo (APAC model only)	
Band Options	<p><b>Asia-Pacific (APAC model)</b> LTE = B1, B3, B5*, B7, B8, B18*, B19*, B21*, B28, B38 (TDD), B39* (TDD), B40 (TDD), B41* (TDD) DC-HSPA+/ HSPA+/ HSPA/ UMTS = B1, B5*, B6*, B8, B9*, B19*</p> <p><b>Europe &amp; North America (EUNA model)</b> LTE = B1, B2*, B3, B4*, B5*, B7, B8, B12*, B13*, B20, B25*, B26*, B29*, B30*, B41* (TDD) DC-HSPA+/ HSPA+/ HSPA/ UMTS = B1, B2*, B3, B4*, B5*, B8</p>	<p><b>World Wide (WW model)</b> LTE = B1, B2*, B3, B4*, B5*, B7, B8, B9*, B12*, B13*, B18*, B19*, B20, B26*, B28, B29*, B30*, B32*, B41* (TDD), B42* (TDD), B43* (TDD), B46* (TDD), B48* (TDD), B66* WCDMA = B1, B2*, B3*, B4*, B5*, B6*, B8, B9*, B19*</p> <p><b>Asia-Pacific (APAC model)</b> Downlink (Cat 6): FDD: 300 Mbps TDD: 222 Mbps Uplink (Cat 6): FDD: 50 Mbps</p>
	Data Rates – LTE	

	TDD: 26 Mbps		SMA connector for GPS: 1 (female) Power & P-Fail connector: 1 x 6-pole terminal block DIDO : 1 x 5-pole terminal block
	<b>Europe &amp; North America (EUNA model)</b> Downlink (Cat 6): FDD: 300 Mbps TDD: 222 Mbps Uplink (Cat 6): FDD: 50 Mbps TDD: 26 Mbps		Serial Baud Rate: 1000Kbps for RS232 ; 12Mbps for RS422/RS485
	<b>World Wide (WW model)</b> Downlink: Cat 12: 600 Mbps Cat 9: 450 Mbps Uplink: Cat 13: 150 Mbps		Serial Data Bits: 5, 6, 7, 8
			Serial Parity: odd, even, none, mark, space
			Serial Stop Bits: 1, 1.5, 2
			RS-232: Tx, Rx, RTS, CTS, DTR, DSR, DCD, GND
			RS-422: Tx+,Tx-, Rx+, Rx-,GND
			RS-485 (2-wire): Data+, Data-,GND
			Isolation protection: Input power to I/O: 1.5KV isolation Input power to Ethernet 1.5KV isolation Input power to PoE port 1.5KV isolation (PoE model)
			EMMC** : 8G 16G 32G
			DI/DO: 2 Digital Input (DI) : Level 0: -30~2V / Level 1: 10~30V Max. input current:8mA 2 Digital Output(DO): Open collector to 40 VDC, 200mA
<b>Software</b>		<b>LED Indicators</b>	
IPv6/4	Present	Power & System indicator	Per unit: Power 1 (Green), Power 2 (Green), P-Fail (Red) , Ring Master(Green), Storage(Green), Serial1/Serial2(Green) ,Ready(Green)
VPN	Multi-site VPN, Open VPN, L2TP over IPSec, IPsec, L2 over GRE, IPGRE and NAT	10/100/1000Base-T(X) port indicator	Link/Activity (Green), Speed (1000T: Yellow; 10/100TX: off), PoE (Green, PoE model)
Firewall	DDoS, IP address filter / Mac address filter / TCP/UDP port number	SIM	Green for Link/Act
Load Balancing	5 schemes for multiple WAN(client mode)	GPS	Green for Link/Act
<b>Basic</b>		Fault	Red: Ethernet link down or power down
Fixed	All traffic will be distributed to a single WAN.	<b>Fault contact</b>	
Failover	Routes connections through preferred WAN link while others stand-by. Sequentially activating another link if the preferred link fails.	Relay	Relay output to carry capacity of 1A at 24VDC
Priority	Select the active WAN according to priority.	<b>Power</b>	
Weighted Round-Robin	Evenly distribute the traffic over all working WAN links in circular order according to the specified weights	Input power	Dual DC input, 9~56VDC (24V model)
Custom Route	Routing through the selected WAN for each specific traffic ex: TCP/UDP port number and IP address.	PoE Budget (PoE model)	80W @12V /80W@24V
Security	SSH/SSL/HTTPS	Power consumption (Typ.)	30.5 Watts
Login Security	Supports IEEE802.1x Authentication/RADIUS	<b>Physical Characteristic</b>	
Access Security	HTTP/HTTPS/Telnet/SSH & Administration; SNMP v1/v2/v3 access for authentication via MD5/SHA(v3) and Encryption via DES/AES(v3)	Enclosure	IP 30 Metal case
Protocol	PPPoE Client,DHCP server/client, Adjustable MTU, Port forwarding (NAPT), DMZ; NAT, SNTP, Firewall(Firewall(DDoS; IP address filter / Mac address filter / TCP/UDP port name ),VRRP, DDNS	Dimension	74 (W) x 142 (D) x 152 (H) mm
Routing	Static route / RIPv2 / OSPF / BGP / EIGRP	Weight	900g
Management	SNMP v1,v2c,v3/ Web/Telnet/CLI	<b>Environmental</b>	
Managed function	QOS, VLAN, Multicast, Redundant protection, security	Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Environmental Monitoring	System status for input voltage, current , ambient temperature to be shown in GUI and sent alerting if any abnormal status	Operating Temperature	-40°C ~ 65°C (-40°F ~ 149°F)
Graphic signal display	Graphic LTE signal strength	Operating Humidity	5% to 95% Non-condensing
Timer	Built-in Real Time Clock to keep track of time always(RTC)	<b>Regulatory approvals</b>	
Discovery	IEEE 802.1ab Link Layer Discovery Protocol (LLDP)	Safety	EN 62368
SNMP trap	Device cold / warm start Port link up / link down DI/DO high / low	EMC	FCC Part 15B Class A, EN 55032: 2015, EN 55024: 2010 IEC 61000-6-2, IEC 61000-6-4
Remote Web control	To reboot router by WebUI	EMS	IEC 61000-4-2 (ESD), IEC 61000-4-3 (RS), IEC 61000-4-4 (EFT), IEC 61000-4-5 (Surge), IEC 61000-4-6 (CS), IEC 61000-4-8 (PFMF)
Maintenance	Firmware upgradeable through TFTP/HTTP	Radio Frequency	EN 301 489-1, EN 301 489-17, EN 301 489-19, EN 301 489-52 EN 301 908-1**, EN 303 413, EN 62311
Configuration backup & restore	Supports text configuration file for system quick installation USB port to upload/download configuration by USB dongle	Vehicle certificate	E13**
<b>Physical Ports &amp; System</b>		MTBF	NA
Connectors	10/100/1000T: 4x ports RJ 45 (PoE model incl 4 PoE ports) 2 WAN Dual Speed SFP port x 2ports USB x 1 RS-232 connector: 1 x RJ 45 Serial connector : 2 DB9 SIM card slots : 4(2L) or 2(1L) 2L model SMA connector for LTE: 4 (female) SMA connector for GPS: 2 (female) 1L model SMA connector for LTE: 2 (female)	Warranty	5 years

\*Future Release  
\*\*Optional  
※Standard test of the following bands are not listed in EN 301 908-1 report:  
(APAC not listed bands) LTE = B5, B18, B19, B21, B39, B41  
WCDMA = B5, B6, B9, B19;  
(EUNA not listed bands) LTE = B2, B4, B5, B12, B13, B25, B26, B29, B30, B41  
WCDMA = B2, B4, B5;  
(WW not listed bands) LTE = B2, B4, B5, B9, B12, B13, B18, B19, B26, B29, B30, B32,  
B41, B42, B43, B46, B48, B66  
WCDMA = B2, B3, B4, B5, B6, B9, B19

## ORDERING INFORMATION

- **IPMR-3004DF-2L-2S-24V-EUNA.....P/N: 8692-001**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/ 2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; EU and US band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2S-24V-APAC.....P/N: 8692-002**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/ 2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; APAC band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2S-24V-WW.....P/N: 8692-003**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/ 2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; worldwide band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2SA-24V-EUNA.....P/N: 8692-0011**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; EU and US band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2SA-24V-APAC.....P/N: 8692-0021**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; APAC band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2SA-24V-WW.....P/N: 8692-0031**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; Worldwide band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2SB-24V-EUNA.....P/N: 8692-0012**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; EU and US band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2SB-24V-APAC.....P/N: 8692-0022**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; APAC band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-2L-2SB-24V-WW.....P/N: 8692-0032**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; Worldwide band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2S-24V-EUNA.....P/N: 8692-004**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; EU and US band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2S-24V-APAC.....P/N: 8692-005**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; APAC band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2S-24V-WW.....P/N: 8692-006**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; Worldwide band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2SA-24V-EUNA.....P/N: 8692-0041**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; EU and US band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2SA-24V-APAC.....P/N: 8692-0051**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; APAC band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2SA-24V-WW.....P/N: 8692-0061**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; Worldwide band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2SB-24V-EUNA.....P/N: 8692-0042**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; EU and US band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2SB-24V-APAC.....P/N: 8692-0052**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; APAC band; dual input 9~56VDC; -40~65C
- **IPMR-3004DF-1L-2SB-24V-WW.....P/N: 8692-0062**  
 Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP incl.4 PoE; Worldwide band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-2L-2S-24V-EUNA.....P/N: 8691-001**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/ 2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP; EU and US band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-2L-2S-24V-APAC.....P/N: 8691-002**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/ 2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP; APAC band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-2L-2S-24V-WW.....P/N: 8691-003**  
 Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/ 2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP; worldwide band; dual input 9~56VDC; -40~65C
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- **IMR-3004DF-2L-2SB-24V-APAC.....P/N: 8691-0022**
- Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP; APAC band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-2L-2SB-24V-WW.....P/N: 8691-0032**
- Industrial Dual LTE (Quad SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP; Worldwide band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2S-24V-EUNA.....P/N: 8691-007**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP; EU and US band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2S-24V-APAC.....P/N: 8691-004**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP; APAC band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2S-24V-WW.....P/N: 8691-005**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS232 serial ports and 4 Giga ports and 2 WAN dual speed SFP; Worldwide band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2SA-24V-EUNA.....P/N: 8691-0071**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP; EU and US band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2SA-24V-APAC.....P/N: 8691-0041**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP; APAC band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2SA-24V-WW.....P/N: 8691-0051**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS422 serial ports and 4 Giga ports and 2 WAN dual speed SFP; Worldwide band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2SB-24V-EUNA.....P/N: 8691-0072**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP; EU and US band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2SB-24V-APAC.....P/N: 8691-0042**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP; APAC band; dual input 9~56VDC; -40~65C
- **IMR-3004DF-1L-2SB-24V-WW.....P/N: 8691-0052**
- Industrial One LTE (Dual SIM) Load Balancing Multifunction Router managed Ethernet Switch w/2 RS485 serial ports and 4 Giga ports and 2 WAN dual speed SFP; Worldwide band; dual input 9~56VDC; -40~65C

**EMMC Flash Storage**

- **8G.....P/N: 8850-113**
- **16G.....P/N: 8850-114**
- **32G.....P/N: 8850-115**

**OPTIONAL ACCESSORIES**

**DIN Rail Power**

- **NDR-480 Series** 480W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-240 Series** 240W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-120 Series** 120W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)
- **NDR-75 Series** 75W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)

**Mini GBIC (SFP)**

- **8330-162-V1** MINI GBIC 1000SX (LC/MM/0.5KM) Transceiver
- **8330-163-V1** MINI GBIC 1000SX2 (LC/MM/2KM) Transceiver
- **8330-165-V1** MINI GBIC 1000LX (LC/SM/10KM) Transceiver
- **8340-0591-V1** MINI GBIC 1000LHX (LC/SM/40KM) Transceiver
- **8330-166-V1** MINI GBIC 1000XD (LC/SM/50KM) Transceiver
- **8330-169-V1** MINI GBIC 1000XD (LC/SM/60KM) Transceiver
- **8330-167-V1** MINI GBIC 1000ZX (LC/SM/80KM) Transceiver
- **8330-170-V1** MINI GBIC 1000EZ (LC/SM/120KM) Transceiver
- **8330-168-V1** MINI GBIC 10/100/1000T (100m) Transceiver
- **8330-060-V1** MINI GBIC 100Base (LC/MM/2KM) Transceiver
- **8330-065-V1** MINI GBIC 100Base (LC/MM/5KM) Transceiver
- **8330-061-V1** MINI GBIC 100Base (LC/SM/30KM) Transceiver
- **8330-197-V1** 1.25Gbps BiDi SFP 0.5KM Transceiver (WDM 1310)
- **8330-198-V1** 1.25Gbps BiDi SFP 0.5KM Transceiver (WDM 1550)
- **8330-195-V1** 1.25Gbps BiDi SFP 2KM Transceiver (WDM 1310)
- **8330-196-V1** 1.25Gbps BiDi SFP 2KM Transceiver (WDM 1550)
- **8330-188-V1** 1.25Gbps BiDi SFP 10KM Transceiver (WDM 1310)
- **8330-189-V1** 1.25Gbps BiDi SFP 10KM Transceiver (WDM 1550)
- **8330-186-V1** 1.25Gbps BiDi SFP 20KM Transceiver (WDM 1310)
- **8330-187-V1** 1.25Gbps BiDi SFP 20KM Transceiver (WDM 1550)
- **8330-180-V1** 1.25Gbps BiDi SFP 40KM Transceiver (WDM 1310)
- **8330-182-V1** 1.25Gbps BiDi SFP 40KM Transceiver (WDM 1550)
- **8330-181-V1** 1.25Gbps BiDi SFP 60KM Transceiver (WDM 1310)
- **8330-183-V1** 1.25Gbps BiDi SFP 60KM Transceiver (WDM 1550)
- **8330-184-V1** 1.25Gbps BiDi SFP 80KM Transceiver (WDM 1490)
- **8330-185-V1** 1.25Gbps BiDi SFP 80KM Transceiver (WDM 1550)
- **8330-071-V1** 125Mbps BiDi SFP 2KM (WDM 1310) Transceiver
- **8330-072-V1** 125Mbps BiDi SFP 2KM (WDM 1550) Transceiver
- **8330-069-V1** 125Mbps BiDi SFP 20KM (WDM 1310) Transceiver
- **8330-068-V1** 125Mbps BiDi SFP 20KM (WDM 1550) Transceiver
- **8330-080-V1** 125Mbps BiDi SFP 40KM (WDM 1310) Transceiver
- **8330-082-V1** 125Mbps BiDi SFP 40KM (WDM 1550) Transceiver
- **8330-081-V1** 125Mbps BiDi SFP 60KM (WDM 1310) Transceiver
- **8330-083-V1** 125Mbps BiDi SFP 60KM (WDM 1550) Transceiver
- **8330-084-V1** 125Mbps BiDi SFP 80KM (WDM 1310) Transceiver
- **8330-085-V1** 125Mbps BiDi SFP 80KM (WDM 1550) Transceiver
- **8330-191-V1** Dual Speed SFP 100M/1000M-LX 10KM Transceiver

All SFP# ended with D are with DDM function

**Management System**

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

**GPS Antenna**

- **ANT12000001** SMA GPS antenna, 28dB, 300m



**Cellular Antenna**

- **ANT11000041** 2G/3G/4G dipole antenna, 791-960/1710~2170/2500~2700MHz, 3dBi, SMA plug, EU



- **ANT11000042** 2G/3G/4G dipole antenna, 704-960/1710~2170MHz, 3dBi, SMA plug, US



- **ANT11000044** 2G/3G/4G dipole antenna, 704-960/1710~2690MHz, 1.6dBi, SMA plug, EU



- **ANT11000045** 2G/3G/4G dipole antenna, 698-960/1710~2690MHZ, 3dBi, SMA plug, US



**Antenna Base**

- **ADA11000053** Magnetic antenna base for 3G/4G, RP SMA Jack Base, Length : 1M



**Lantech Communications Global Inc.**

[www.lantechcom.tw](http://www.lantechcom.tw)  
[info@lantechcom.tw](mailto:info@lantechcom.tw)

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