SILBO™
An Invendis Product

GRD44-3

PROCESSOR
MediaTek MT7628
128MB DDR RAM, 32MB Flash

CELLULAR
4G/3G/2G with Dual
SIM, External 5DBi antenna

Wi-Fi
2.4GHz, 300Mbps AP,
Station, External 5dBi antennas

INTERFACE
1x WAN 10/100, 2x LAN 10/100

POWER
9-30 V DC

OPERATING SYSTEM
Open-WRT Linux

GRD44-3 Industrial Router Powered by the MediaTek MT7628 processor, this sophisticated solution is meticulously designed to excel in demanding industrial environments. Equipped with a DIN rail mount and compatible with 9V-30V DC power supplies, it seamlessly integrates into industrial networks, offering flexibility with 1 WAN port and 2 LAN ports. Additionally, the router provides advanced cellular connectivity with dual Nano SIM slots and failover capability, allowing users to configure failover options for Cellular WAN, Wired, and Wi-Fi WAN connections. Its comprehensive VPN functionality supports OpenVPN, IPsec, GRE, L2TP, PPTP, and GRE over IPsec protocols, ensuring secure and encrypted communication. Furthermore, the inclusion of OpenVPN tunnel/TAP options enhances versatility, providing users with added flexibility in configuring VPN connections. Engineered with professionalism and reliability, the SILBO GRD44-3 guarantees uninterrupted connectivity and data protection, making it the optimal choice for industrial networking

Accessories:

Rubber Duck LTE Antenna

Rubber Duck Wi-Fi Antenna

Power Cable

Metal Din Rail

STAY CONNECTED

SOFTWARE SPECIFICATIONS

Cellular

Cellular Module	4G (LTE) - Cat 4 up to 150 Mbps, 3G - up to 42 Mbps, 2G - up to 236.8 Kbps
Status	Single strength (RSSI), SINR, RSRP, RSRQ
Band Management	Auto/User configurable Band Lock & Operator Lock
APN	Configurable, Auto APN (Planned)
Modem configuration mode	Single SIM, Dual SIM
SIM switching	Signal strength, ICMP echo, Data limit based
Bridge	Direct connection (bridge) between mobile ISP and device on LAN (Planned)
PDP Type	IPv4, IPv6, Dual stack
Passthrough	Router assigns its mobile WAN IP address to another device on LAN (Planned)

Wi-Fi

Wi-Fi Mode	Access Point, Station, Guest Wi-Fi, Repeater
Encryption	TKIP, AES
Technology	802.11 b/g/n/ac with 20 MHz, 40 MHz
Authentication	WPA (PSK), WPA2 (PSK)
TX Power	Configurable
Wi-Fi Schedular	Scheduled ON/OFF

Firewall & Networking

Routing	Static routing
Network Protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SCP, PPP, SSH, DHCP, SNMP (Planned), TR069
Connecting Monitoring	Ping Reboot, Scheduled Periodic Reboot
NTP	NTP Client
Firewall features	Port forward, traffic rules, SNAT, Zone- Zone traffic control
DHCP	Static and Dynamic
Failover	Configurable Failover option for Cellular WAN, Wired, and Wi-Fi WAN
Authentication	Pre-shared key, X.509 certificates
VLAN	Port based VLAN, Tag based VLAN 802.1ad
Other	MAC binding, black/whitelisting
VPN	Open VPN, IPsec, GRE, L2TP, PPTP, GRE over IPsec, Zero Tier
Open VPN	TUN/TAP
IPsec	IKEv1, IKEv2, supports up to 4xVPN IPsec clients. Encryption: DES, 3DES, AES128, AES192, AES256
PPTP, L2TP	WAN with PPTP/L2TP configuration for secure broadband connection

Remote Management

NMS	Remote monitoring of SILBO Networking products
NMS VPN	Remote access of SILBO and non-SILBO Networking Devices

Gateway

Gateway Protocols	Modbus TCP
Data sender	HTTP, MQTT, Azure MQTT

Operating System

Operating System	Open-WRT based Linux OS
Supported Languages	Shell scripting, C, C++
Development tools	SDK package with built environment provided (Optional)

STAY CONNECTED

HARDWARE SPECIFICATIONS

Operating System

CPU	MediaTek MT7628
FLASH	32MB
RAM	128MB
WAN	1x 10/100
LAN	2x 10/100
SIM	2x Nano SIM (1x Active & 1x Passive)
Wi-Fi	802.11b/g/n/ac
RTC	Built-in RTC for Time synchronization
Reset	Pin hole reset button
Antenna Connecter	Cellular: 2x SMA Connector, Wi-Fi: 2x SMA connector
Enclosure	Sheet Metal Enclosure
Mounting	Din-rail mount (Optional)
Design	Fanless
Dimensions	123.2 x 28 x 120.6mm (W x H x D)
Weight	360 gm
Power	9-30 V DC
Power Connecter	Terminal Block

Operational & Environmental

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Storage Temperature	-30 ~ 70°C
Operating Temperature	-20 ~ 60°C
Humidity	10 ~ 90% (non-condensing)
Ingress Protection Rating	IP30

Regulatory and Approvals

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Regulatory	CE
Emission	CISPR 32 Class A (EN55032)
Immunity	
● ESD	IEC 61000-4-2:2008
● EFT	IEC 61000-4-4:2012
● Surge	IEC 61000-4-5:2014
● Radiated Immunity	IEC 61000-4-3
● Conducted Immunity	IEC 61000-4-6

Standard Packaging

GRD44-3 Cellular Router with Industrial Aluminium Housing , 2x Cellular Rubber Duck Antennas, 2x Wi-Fi Rubber Duck Antennas, 0.5-meter Power Cord, 01-meter Ethernet cable.
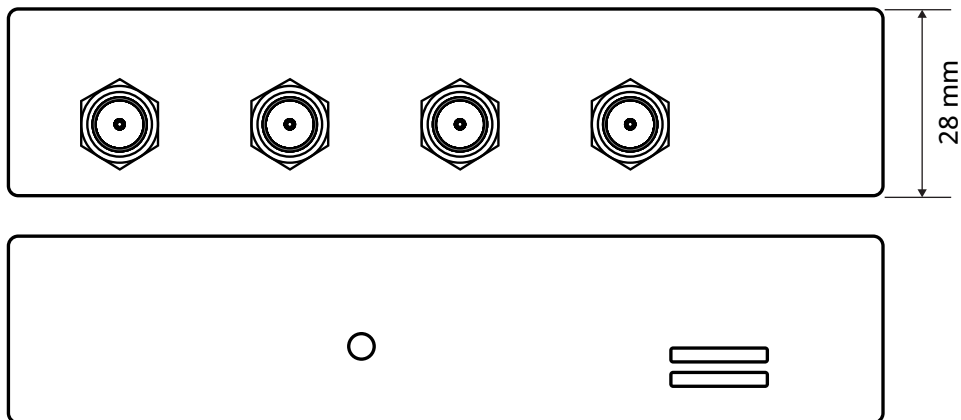
Spatial Measurement:

Front View

123.2 mm

Top View

123.2 mm

120.6 mm

Side View

28 mm
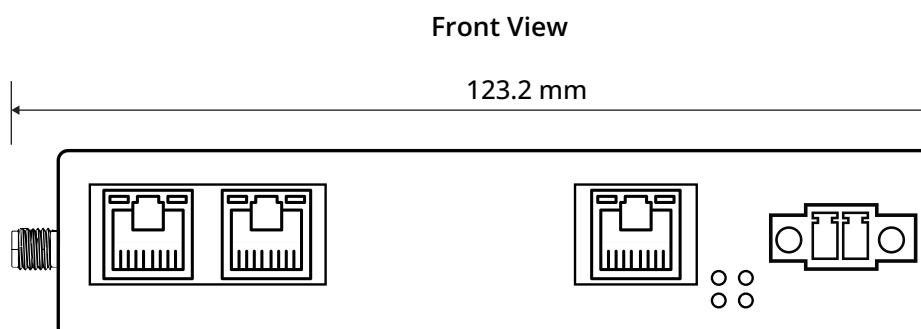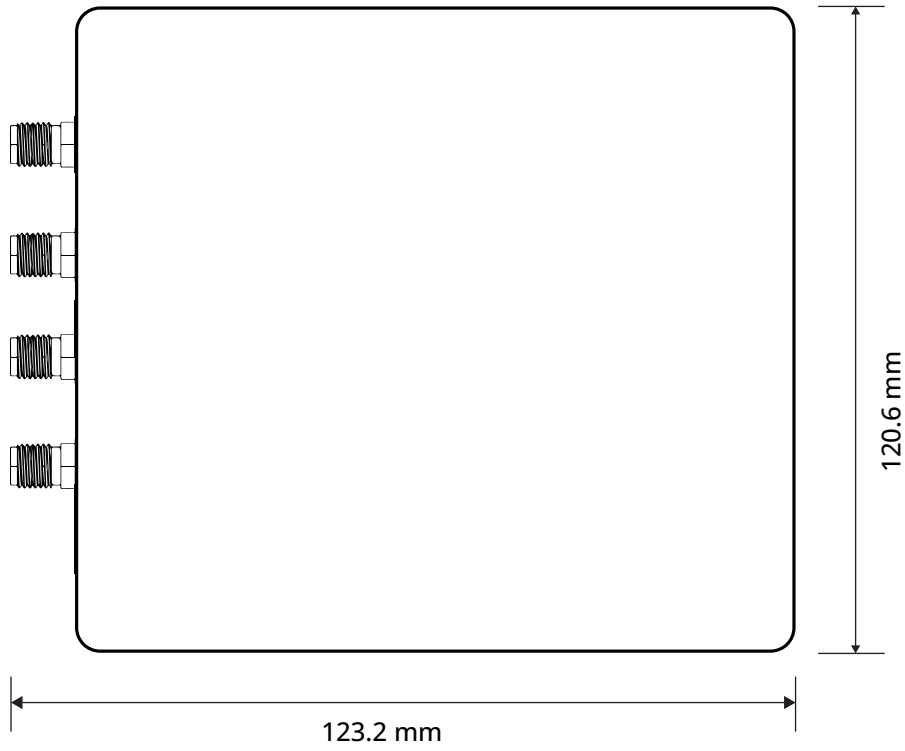
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