



### Best of both worlds

MBX 5G is a quad cellular mobile powerhouse with redundant SIM slots and multi-radio capabilities providing speed, reliability, and coverage by combining the best of 5G and LTE.

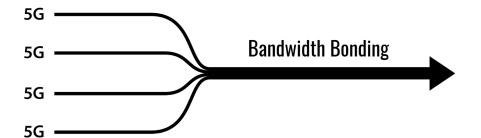
#### **Portability**

Its compact form allows it to be deployed in a wide variety of situations such as vehicles, vessels, and branch networks.

### Compatibility with SIM injector

Its compatibility allows for upgradable modules for further customization to suit any deployment needs.





#### **Optimize your traffic**

Whether you need speed or cost-effectiveness, use Traffic Steering to guide each packet to the most suitable connection.







# **Specifications**

WAN Interface	2x Embedded Cellular Modems with Redundant SIM Slots	Power Output	Up to Eight 802.3at PoE Outputs#	
	3x GE* 2x USB 2.0 Interface	Power Consumption	55 W (max.)	
LAN Interface	9x GE*	Dimensions	1.7 x 11.5 x 7.0 inches	
Wi-Fi Interface	802.11ac/a/b/g/n, 1166 Mbps 2x2MIMO Wi-Fi WAN and/or AP Simultaneous Dual-Band	Weight	43 x 292 x 177 mm 7.28 pounds 3.3 kg	
Router Throughput	2.5 Gbps	Operating Temperature	-40°– 149 °F	
PepVPN Throughput	600 Mbps		-40°– 65 °C	
(No Encryption)		Humidity	15%–95% (non-condensing)	
PepVPN Throughput (256-bit AES)	500 Mbps	Certifications	FCC, CE, RoHS, E-Mark, PTCRB, Shock and Vibration Resistance: EN	
5G Cellular Data Rate@ (Downlink/Uplink)	5G: 4 Gbps / 700 Mbps LTE CAT-20: 2 Gbps / 150 Mbps		61373:1999 IEC 61373:1999 Railway Applications: EN 50155 Electromagnetic Compatibility: EN 61000	
Recommended Users	50-500	Package Content	MAX HD2 MBX, PSU 180W (ACW-630),	
Antenna Connectors	8x SMA Cellular Antenna Connectors 1x SMA GPS Antenna Connector 4x RP-SMA Wi-Fi Antenna Connectors		4x Dual Band Wi-Fi Antennas (ACW-341), 1x GPS Antenna (ACW-232), 8x Cellular Antennas (ACW-235), 1 Pair of Mounting Brackets (ACW-513),	
Power Input	DC Jack/Terminal Block: 12-56 V#		3pin Terminal Block Connector (Ignition sense), 4pin Terminal Block Connector (Power supply), Grounding cable, Rubber Foot Pad set	

## Ordering information

Product Code	Description	Embedded Modems	Carrier/Categories	5G Bands	LTE Bands
MAX-HD2-MBX- 5GD-T	HD2 MBX 5G with 2x 5G modems	2	Global/5G	<b>5G (NSA) Sub 6Ghz:</b> n1, n2, n3, n5, n7, n8, n12, n20, n28, n38, n41, n66, n71, n77, n78, n79	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B46, B48, B66, B71

## **Custom Options**

Product Code	Description
ACW-630	Includes 1x 54V, 3.34A Power Supply Enable 4x LAN with 802.3at PoE output (PoE License automatically applied after kit purchase)
ACW-633	Includes 2x 54V, 3.34A Power Supply Enables 8x LAN with 802.3at PoE output (PoE License automatically applied after kit purchase)
MAX-HD-020-SPF	Supports up to 20 PepVPN/SpeedFusion Peers
SFN-LC-50	Up to 50 SpeedFusion Bonding License Key for MAX HD2 MBX 5G
SIM-BK8-4E-56V	SIM Injector, 8x SIM cards capacity, 4x 10/100/1000 LAN ports, 56V DC
ANT-MB-42G-S-W-6	7-in-1 Cellular and Wi-Fi Antenna System with GPS Receiver (White)
ANT-MB-42G-S-B-6	7-in-1 Cellular and Wi-Fi Antenna System with GPS Receiver (Black)

\*WAN 3 is configured as a LAN port by default, configuration is changeable on the Web Admin.
#2x 54V DC input is needed for all 8x LAN ports to have 802.3at PoE. Plugging in 1x 54V DC input will result in 4x LAN ports having 802.3at PoE.
@Theoretical maximum data rates.
Available globally. Regional and carrier certification is subject to local approval.







# **Specifications**

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WAN Interface	4x Embedded Cellular Modems with	Power Output	Up to Eight 802.3at PoE Outputs#
	Redundant SIM Slots 3x GE* 2x USB 2.0 Interface	Power Consumption	55 W (max.)
LAN Interface	9x GE*	Dimensions	1.7 x 11.5 x 7.0 inches 43 x 292 x 177 mm
Wi-Fi Interface	802.11ac/a/b/g/n, 1166 Mbps 2x2MIMO Wi-Fi WAN and/or AP Simultaneous Dual-Band	Weight	7.28 pounds 3.3 kg
Router Throughput	2.5 Gbps	Operating Temperature	-40°– 149°F -40°– 65°C
PepVPN Throughput (No Encryption)	600 Mbps	Humidity	15%–95% (non-condensing)
PepVPN Throughput (256-bit AES)	500 Mbps	Certifications	FCC, CE, RoHS, E-Mark, PTCRB, Shock and Vibration Resistance: EN 61373:1999 IEC 61373:1999
5G Cellular Data Rate@ (Downlink/Uplink)	5G: 4 Gbps / 700 Mbps LTE CAT-20: 2 Gbps / 150 Mbps		Railway Applications: EN 50155 Electromagnetic Compatibility: EN 61000
Recommended Users	50-500	Package Content	MAX HD4 MBX,PSU 180W (ACW-630), 1x QMA to SMA Adaptor (for GPS),
Antenna Connectors	16x QMA Antenna Connectors 1x QMA GPS Antenna Connector 4x RP-SMA Wi-Fi Antenna Connectors		1x GPS Antenna (ACW-232), 1 Pair of Mounting Brackets (ACW-513), 4x Dual Band Wi-Fi Antennas (ACW-341), 3pin Terminal Block Connector (Ignition sense),
Power Input	DC Jack/Terminal Block: 12-56 V#		4pin Terminal Block Connector (Power supply), Grounding cable, Rubber Foot Pad set * Cellular antennas not included. To enhance the MBX, Puma antennas are recommended.

# Ordering information

Product Code	Description	Embedded Modems	Carrier/Categories	5G Bands	LTE Bands
MAX-HD4-MBX- 5GD-T	HD4 MBX 5G with 4x 5G modems	4	Global/5G	<b>5G (NSA) Sub 6Ghz:</b> n1, n2, n3, n5, n7, n8, n12, n20, n28, n38, n41, n66, n71, n77, n78, n79	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B46, B48, B66, B71

### Add-On Feature & Accessories

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Product Code	Description					
ACW-630	Includes 1x 54V, 3.34A Power Supply Enable 4x LAN with 802.3at PoE output (PoE License automatically applied after kit purchase)					
ACW-633	Includes 2x 54V, 3.34A Power Supply Enables 8x LAN with 802.3at PoE output (PoE License automatically applied after kit purchase)					
MAX-HD-020-SPF	Supports up to 20 PepVPN/SpeedFusion Peers					
SFN-LC-50	Up to 50 SpeedFusion Bonding License Key for MAX HD4 MBX 5G					
SIM-BK8-4E-56V	SIM Injector, 8x SIM cards capacity, 4x 10/100/1000 LAN ports, 56V DC					
ANT-MB-42G-Q-W-6	7-in-1 Cellular and Wi-Fi Antenna System with GPS Receiver (White)					
ANT-MB-40G-Q-B-6	5-in-1 Cellular Antenna System with GPS Receiver (White)					
ANT-MB-40G-Q-W-6	5-in-1 Cellular Antenna System with GPS Receiver (Black)					



<sup>\*</sup>WAN 3 is configured as a LAN port by default, configuration is changeable on the Web Admin.

\*2x 54V DC input is needed for all 8x LAN ports to have 802.3at PoE. Plugging in 1x 54V DC input will result in 4x LAN ports having 802.3at PoE.

<sup>®</sup>Theoretical maximum data rates
Available globally. Regional and carrier certification is subject to local approval.

# **Expansion Module for HD2 MBX**



## **Specifications**

(Downlink/Uplink)

Interface 2x Embedded Cellular Modems with Dimensions
Redundant SIM Slots

LTE CAT-20: 2 Gbps / 150 Mbps

Antenna Connectors 8x SMA Antenna Connectors, Weight 2.2 pounds

1x SMA GPS Antenna Connector 1 kg

5G Cellular Data Rate® 5G: 4 Gbps / 700 Mbps

## Ordering information

Product Code	Description	Embedded Modems	Carrier/Categories	5G Bands	LTE Bands
EXM-MBX-T2- 5GD	Expansion Module for HD2 MBX 5G with 2x 5G modems	2	Global/ 5G	<b>5G (NSA) Sub 6Ghz:</b> n1, n2, n3, n5, n7, n8, n12, n20, n28, n38, n41, n66, n71, n77, n78, n79	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B46, B48, B66, B71





0.9 x 11.5 x 3.5 inches

22 x 292 x 88 mm

# **Expansion Module for HD4 MBX**



# **Specifications**

Interface 4x Embedded Cellular Modems with

Redundant SIM Slots

Antenna Connectors 16x QMA Antenna Connectors,

1x QMA GPS Antenna Connector

5G Cellular Data Rate@ (Downlink/Uplink) 5G: 4 Gbps / 700 Mbps LTE CAT-20: 2 Gbps / 150 Mbps **Dimensions** 

0.9 x 11.5 x 3.5 inches 22 x 292 x 88 mm

Weight

2.2 pounds 1 ka

### Ordering information

Product Code	Description	Embedded Modems	Carrier/Categories	5G Bands	LTE Bands
EXM-MBX-T4- 5GD	Expansion Module for HD4 MBX 5G with 4x 5G modems	4	Global/5G	5G (NSA) Sub 6Ghz: n1, n2, n3, n5, n7, n8, n12, n20, n28, n38, n41, n66, n71, n77, n78, n79	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B46, B48, B66, B71

