# MBX 5G



# 5G Quad Cellular Mobile Powerhouse

#### 双重强大

MBX 5G是一款四路蜂窝移动强力设备,具备冗余的 SIM卡槽和多无线电功能,通过将5G和LTE的优点结合 在一起,提供了速度、可靠性和覆盖范围的最佳组合。

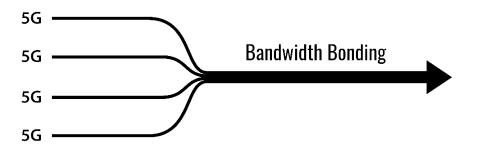
### 便携性

其紧凑的外形使其可以在各种情况下部署,如车辆、 船只和分支网络等。

### 与 SIM 注入器的兼容性

它的兼容性允许升级模块以进一步定制以满足任何 部署需求。





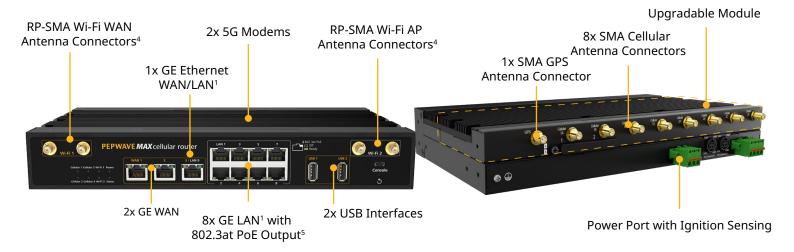
#### 优化您的流量

无论您需要速度还是成本效益,使 用流量导向将每个数据包引导到最 合适的连接。



# HD2 MBX 5G





### **Specifications**

WAN Interface	3x 10/100/1000M Ethernet 1

2x Embedded Cellular Modems with

Redundant SIM Slots 2x USB Interface

**LAN Interface** 9x 10/100/1000M Ethernet 1

Wi-Fi Interface Simultaneous Dual-Band (2.4GHz / 5GHz)

> Wi-Fi 5 2x2 MIMO Wi-Fi WAN and/or AP

**SpeedFusion Features** Hot Failover, WAN Smoothing,

Bandwidth Bonding

Number of

SpeedFusion VPN

Peers

2 / 20 / 50 2

**Features Ignition Sensing** 

**Router Throughput** 2.5Gbps

SpeedFusion Throughput

(No Encryption)

600 Mbps

SpeedFusion Throughput 500 Mbps

(256-bit AES)

**Recommended Users** 50-500

Cellular Data Rate 3 (Downlink / Uplink) 5G: 4 Gbps / 700 Mbps CAT-20: 2 Gbps / 150 Mbps

8x SMA Cellular Antenna Connectors **Antenna Connectors** 

4x RP-SMA Wi-Fi Antenna Connectors <sup>4</sup> 1x SMA GPS Antenna Connector

**Power Input** Power Port: 12V - 56V DC

AC Adapter: AC Input 100V-240V / DC Output 12V

Terminal Block: 12V - 56V DC

**Power Output** Up to Eight 802.3at PoE Outputs 5

**Power Consumption** 55W (max.)

**Dimensions** 1.7 x 11.5 x 7.0 inches / 43 x 292 x 177 mm

Weight 7.28 pounds / 3.3 kg

**Operating Temperature** -40° - 149°F / -40° - 65°C

Humidity 15% - 95% (non-condensing)

Certifications FCC, CE, RoHS

F-Mark

EN61373 Shock and Vibration Resistance

EN50155 Railway Applications -

Electronic Equipment used on Rolling Stock **EN61000 Electromagnetic Compatibility** 

**Package Content** 1x MAX HD2 MBX

8x LTE Antennas (ACW-813)

4x Wi-Fi Dual Band Antenna (ACW-341) 1x GPS Active Antenna (ACW-232) 1x Power Supply (ACW-630)

1x 3pin Terminal Block Connector (Ignition sense) 1x 4pin Terminal Block Connector (Power supply) 1x Grounding Cable & Rubber Foot Pad Set 1 Pair of Mounting Brackets (ACW-513)

Warranty 1-Year Limited Warranty

<sup>&</sup>lt;sup>1</sup> WAN 3 is configured as a LAN port by default, configuration is changeable on the Web Admin.
<sup>2</sup> With purchase of optional SpeedFusion License (MAX-HD-020-SPF/ SFN-LC-50) can connect to up to 20/50 SpeedFusion peers respectively

<sup>&</sup>lt;sup>3</sup> Maximum theoretical data rates.
<sup>4</sup> For proper Wi-Fi performance and operations, please ensure all 4 Wi-Fi antenna connectors (labeled Wi-Fi 1 and Wi-Fi 2) have antennas attached.

<sup>5 2</sup>x 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



### **Ordering Information**

Product Code Regions

MAX-HD2-MBX-5GD-T Embedded Modem(s): 2x 5G Primary: APAC & EMEA Compatibility: Global

**5G (NSA) Sub 6Ghz** n1, n2, n3, n5, n7, n8, n12, n20,

**5G Bands** 

n28, n38, n41, n66, n71, n77, n78, n79

LTE Bands

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

MAX-HD2-MBX-5GH-T Embedded Modem(s):

2x 5G

Primary: North America\* Compatibility: Global

\*US Carrier Certifications: AT&T, T-Mobile, US Cellular 5G (NSA) Sub 6Ghz

n1, n2, n3, n5, n28, 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

#### **Featured Add-ons**

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 SpeedFusion VPN Peers

SFN-LC-50 Up to 50 SpeedFusion Bonding License Key for MAX HD2/HD4 MBX 5G

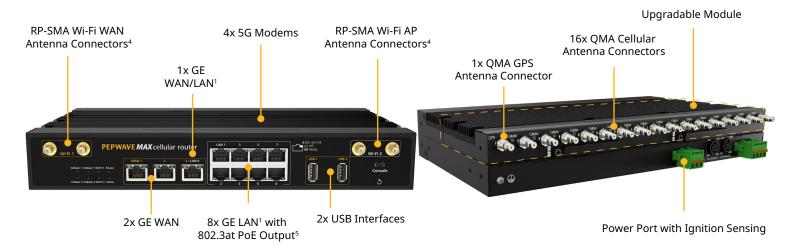
SIM-BK8-4E-56V SIM Injector, 8x SIM cards capacity, 4x 10/100/1000 LAN ports, 56V DC

ANT-MB-42G-S-B-6 7-in-1 Cellular and Wi-Fi Antenna System with GPS Receiver (Black)

ANT-MB-42G-S-W-6 7-in-1 Cellular and Wi-Fi Antenna System with GPS Receiver (White)

# HD4 MBX 5G





## **Specifications**

WAN Interface	3x 10/100/1000M Ethernet 1

4x Embedded Cellular Modems with

Redundant SIM Slots 2x USB Interface

**LAN Interface** 9x 10/100/1000M Ethernet 1

Wi-Fi Interface Simultaneous Dual-Band (2.4GHz / 5GHz)

> Wi-Fi 5 2x2 MIMO Wi-Fi WAN and/or AP

**SpeedFusion Features** Hot Failover, WAN Smoothing,

Bandwidth Bonding

Number of

SpeedFusion VPN

Peers

2/20/502

**Features Ignition Sensing** 

**Router Throughput** 2.5Gbps

SpeedFusion Throughput

(No Encryption)

600 Mbps

SpeedFusion Throughput 500 Mbps

(256-bit AES)

**Recommended Users** 50-500

Cellular Data Rate 3 (Downlink / Uplink) 5G: 4 Gbps / 700 Mbps CAT-20: 2 Gbps / 150 Mbps

16x QMA Cellular Antenna Connectors **Antenna Connectors** 

4x RP-SMA Wi-Fi Antenna Connectors 4 1x QMA GPS Antenna Connector

**Power Input** Power Port: 12V - 56V DC

AC Adapter: AC Input 100V-240V / DC Output 12V

Terminal Block: 12V - 56V DC

**Power Output** Up to Eight 802.3at PoE Outputs 5

**Power Consumption** 55W (max.)

**Dimensions** 1.7 x 11.5 x 7.0 inches / 43 x 292 x 177 mm

Weight 7.28 pounds / 3.3 kg

**Operating Temperature** -40° - 149°F / -40° - 65°C

Humidity 15% - 95% (non-condensing)

Certifications FCC, CE, RoHS

F-Mark

EN61373 Shock and Vibration Resistance

EN50155 Railway Applications -

Electronic Equipment used on Rolling Stock **EN61000 Electromagnetic Compatibility** 

Package Content 6 1x MAX HD4 MBX

4x Wi-Fi Dual Band Antennas (ACW-341) 1x QMA to SMA Adapter (For GPS) 1x GPS Active Antenna (ACW-232) 1x Power Supply (ACW-630)

1x 3pin Terminal Block Connector (Ignition sense) 1x 4pin Terminal Block Connector (Power supply) 1x Grounding Cable & Rubber Foot Pad Set 1 Pair of Mounting Brackets (ACW-513)

Warranty 1-Year Limited Warranty

WAN 3 is configured as a LAN port by default, configuration is changeable on the Web Admin.

<sup>&</sup>lt;sup>2</sup> With purchase of optional SpeedFusion License (MAX-HD-020-SPF/ ŠFN-LC-50) can connect to up to 20/50 SpeedFusion peers respectively

Maximum theoretical data rates.

<sup>&</sup>lt;sup>4</sup> For the best performance and reliability, all 4 RF connectors must be connected to the same type and performance antennas

<sup>&</sup>lt;sup>5</sup> 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>5</sup> Cellular antennas not included. To enhance the MBX, Peplink antennas are recommended.



### **Ordering Information**

Product Code Regions 5G Bands

MAX-HD4-MBX-5GD-T Primary: APAC & EMEA **5G (NSA) Sub 6Ghz**Embedded Modem(s): Compatibility: Global n1, n2, n3, n5, n7, n

Compatibility: Global 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

**LTE Bands** 

MAX-HD4-MBX-5GH-T

4x 5G

Embedded Modem(s): **4x 5G** 

Primary: North America\* Compatibility: Global

\*US Carrier Certifications: AT&T, T-Mobile, US Cellular, Verizon 5G (NSA) Sub 6Ghz

n1, n2, n3, n5, n28, 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

#### **Featured Add-ons**

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 SpeedFusion VPN Peers

SFN-LC-50 Up to 50 SpeedFusion Bonding License Key for MAX HD2/HD4 MBX 5G

SIM-BK8-4E-56V SIM Injector, 8x SIM cards capacity, 4x 10/100/1000 LAN ports, 56V DC

ANT-MB-42G-S-B-6 7-in-1 Cellular and Wi-Fi Antenna System with GPS Receiver (Black)

ANT-MB-42G-S-W-6 7-in-1 Cellular and Wi-Fi Antenna System with GPS Receiver (White)

# **Expansion Module for HD2 MBX**





**SMA Connectors** 

# **Specifications**

(Downlink / Uplink)

Interface 2x Embedded Cellular Modems with Dimensions 0.9 x 11.5 x 3.5 inches / 22 x 292 x 88 mm

Redundant SIM Slots

CAT-20: 2 Gbps / 150 Mbps

Antenna Connectors8x SMA Antenna ConnectorsWeight2.2 pounds / 1 kg

1x SMA GPS Antenna Connectors

Cellular Data Rate 1 5G: 4 Gbps / 700 Mbps

# Ordering Information

#### LTE Bands **Product Code** Regions **5G Bands** 5G (NSA) Sub 6Ghz EXM-MBX-T2-5GD Primary: APAC & EMEA Embedded Modem(s): Compatibility: Global n1, n2, n3, n5, n7, n8, n12, n20, B1, B2, B3, B4, B5, B7, B8, B12, B13, 2x 5G n28, n38, n41, n66, n71, n77, n78, B14, B17, B18, B19, B20, B25, B26, n79 B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B46, B48, B66, B71 EXM-MBX-T2-5GH Primary: North America 5G (NSA) Sub 6Ghz Compatibility: Global n1, n2, n3, n5, n28, n41, n66, n71, B1, B2, B3, B4, B5, B7, B8, B12, B13, Embedded Modem(s): n77, n78, n79 B14, B17, B18, B19, B20, B25, B26, 2x 5G

B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B46, B48, B66, B71

<sup>&</sup>lt;sup>1</sup> Maximum theoretical data rates.

# **Expansion Module for HD4 MBX**





**QMA Connectors** 

# **Specifications**

**Interface** 4x Embedded Cellular Modems with **Dimensions** 0.9 x 11.5 x 3.5 inches / 22 x 292 x 88 mm

Redundant SIM Slots

Antenna Connectors 16x QMA Antenna Connectors Weight 2.2 pounds / 1 kg 1x QMA GPS Antenna Connectors

Cellular Data Rate <sup>1</sup> 5G: 4 Gbps / 700 Mbps (Downlink / Uplink) CAT-20: 2 Gbps / 150 Mbps

### **Ordering Information**

Product Code	Regions	5G Bands	LTE Bands
EXM-MBX-T4-5GD Embedded Modem(s): 4x 5G	Primary: APAC & EMEA Compatibility: Global	<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
EXM-MBX-T4-5GH Embedded Modem(s): 4x 5G	Primary: North America Compatibility: Global	<b>5G (NSA) Sub 6Ghz</b> n1, n2, n3, n5, n28, 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

<sup>&</sup>lt;sup>1</sup> Maximum theoretical data rates.