

Digital Band Selective Pico Repeater Solution

mPico Max

Product Description

System Model#: MP-MAX0708091821, MP-MAX0809182135

The mPico Max series is a compact, enterprise-grade solution designed to extend reliable wireless coverage in small indoor venues or blind-spot hotspots. A single unit supports multiple frequency bands, each hosting carrier-agnostic inputs, maximizing spectrum efficiency while minimizing hardware footprint. Compact and lightweight, mPico Max slashes deployment time and cost for multi-operators, multi-bands enterprise environments.

Features

- Adapt to BB-PPDR, 2G, 3G, 4G and 5G network standards, with software upgrades enabling support for future network generations
- Offer customized pre-configuration for effortless installation and operation
- Incorporate advanced oscillation and isolation detection features to prevent the emission of harmful signals that could disrupt mobile networks
- Continuously monitor uplink power in real-time, automatically muting the uplink when no active users are present to optimize network performance
- Ensure unconditionally network safety by providing coverage exclusively to authorized CELL-IDs or operator PLMN-IDs.



Sub-3G Type



Sub-6G Type

MP-MAX0708091821 Sub-3G Type Configuration – Output Power & Gain Specifications

Frequency Band	Band 28	Band 20	Band 8	Band 3	Band 1
Uplink Frequency	698–733 MHz	832–862 MHz	880–915 MHz	1710–1785 MHz	1920–1980 MHz
Downlink Frequency	753–788 MHz	791–821 MHz	925–960 MHz	1805–1880 MHz	2110–2170 MHz
Uplink Output Power	14 dBm	14 dBm	14 dBm	20 dBm	20 dBm
Downlink Output Power	17 dBm	17 dBm	17 dBm	23 dBm	23 dBm
Operation Bandwidth	35 MHz	30 MHz	35 MHz	75 MHz	60 MHz
Instantaneous Bandwidth	35 MHz	30 MHz	35 MHz	75 MHz	60 MHz
Number of Sub-bands	4	4	4	4	4
Bandwidth Per Sub-band	3–20 MHz	3–20 MHz	0.2–20 MHz	3–20 MHz	3–20 MHz
Maximum Gain	90 dB	90 dB	90 dB	95 dB	95 dB

MP-MAX0809182135 Sub-6G Type Configuration – Output Power & Gain Specifications

Frequency Band	Band 20	Band 8	Band 3	Band 1	NR n78
Uplink Frequency	832–862 MHz	880–915 MHz	1710–1785 MHz	1920–1980 MHz	3410–3800 MHz
Downlink Frequency	791–821 MHz	925–960 MHz	1805–1880 MHz	2110–2170 MHz	3410–3800 MHz
Uplink Output Power	14 dBm	14 dBm	20 dBm	20 dBm	23 dBm
Downlink Output Power	17 dBm	17 dBm	23 dBm	23 dBm	27 dBm
Operation Bandwidth	30 MHz	35 MHz	75 MHz	60 MHz	390 MHz
Instantaneous Bandwidth	30 MHz	35 MHz	75 MHz	60 MHz	390 MHz
Number of Sub-bands	4	4	4	4	4
Bandwidth Per Sub-band	3–20 MHz	0.2–20 MHz	3–20 MHz	3–20 MHz	20–100 MHz
Maximum Gain	90 dB	90 dB	95 dB	95 dB	100 dB

Electrical Specifications

Networks	BB-PPDR, 2G, 3G, 4G, 5G NSA/SA, 5G-Advanced
Network Protocols	GSM, UMTS, LTE, NR, Dynamic Spectrum Sharing, Carrier Aggregation
Compliance	RED 2014/53/EU (Article 3.1a, 3.1b, 3.2, 3.3d), RoHS
ATT Adjustable	Automatic Gain Control (AGC) or Manual Set, 0 - 30 dB range, 1 dB per step
ALC Range	≥ 25 dB
Pass Band Ripple (p-p)	≤ 4 dB
EVM	≤ 8% @ LTE, ≤ 3.5% @ NR
Uplink Noise Figure	≤ 7 dB @ Sub-3G Band, ≤ 10dB @ NR n78
System Delay	≤ 6 μs @ Sub-3G Band, ≤ 4 μs @ NR n78
Absolute Max RF Input Power	-10 dBm
Input VSWR	≤ 2.0
Impedance	50 Ω

Interfaces & Mechanical Specifications

Donor / Server RF Ports	SMA Female, SMA to N-type or SMA to 4.3-10 Jumper Cable Optional
Local LED Indicators	Power, Run, Alarm, SYNC @ NR n78
Local Management	Web GUI via USB Type-C
Remote Management	CSP3 or SNMPv3 Protocol via Wireless LTE Modem
Dimensions (H x W x D)	350 x 247 x 57 mm
Weight	4 kg
Power Supply	External Power Adapter 100 - 240 VAC / 50-60 Hz, 0.5-1.2 A
Battery Backup	Approx. 2 Hours Monitoring after AC Cutoff
Power Consumption (Max.)	120 Watt
Heat Dissipation	Convection Cooling
Operating Temperature	-20 °C to +45°C
Operating Humidity	≤ 85 %
Ingress Protection Rating	IP30
Mounting and Installation	Wall Mount