**FDD/TDD 4G5G Home Booster C20M-BxNx**

**Product Summary:**

With big promotion of 5G network construction in major developed regions all over the world in 2021, 5G users are increasing significantly. However, because the global 5G frequency mostly use 3.5GHz frequency, the higher the carrier frequency, the shorter the wavelength, the greater the space loss, and the easier it is to be shielded by obstacles,which means that it is difficult for the outdoor 5G base station to cover 5G indoor signal, which seriously affects the experience of 5G users.

C20M-BxNx 4G 5G dual band series is specially designed to improve 5G signal for home and office pico repeater. by installing the donor antenna at outdoor where there is good signal strength, the donor antenna would send the picked up 4G 5G signal by the coaxial cable to the pico repeater BTS port, after the 4G 5G micro-power repeater detects the 5G BTS signal, it quickly analyzes the SSB ARFCN and time slot parameters, and after synchronizing with the BTS, the BTS signal is enhanced and sent to the service antenna, to achieve indoor 4G 5G signal coverage for the weak or blind indoor area.

**Product Features:**

* Adaptive 5G base station SSB ARFCN and time slot ratio, fast and accurate synchronization,
* MGC, manual control of output gain with 1dB step in the range of 31dB,
* AGC, when the received signal is too strong, the device will start the AGC function to reduce the gain, and automatically turn off the downlink output when the received signal exceeds the control range of the AGC,
* Real-time detection of the isolation between the donor antenna and the service antenna,
* Automatic shutdown function, when the system is self-excited by the insufficient isolation, the device will automatic shutdown the uplink and down link output power,
* Idle turn-off function, when there is no user in the coverage area, the device enters the sleep mode to reduce interference to the base station,
* Support OTG or Bluetooth connection to mobile APP to achieve management,
* Support 4G modem wireless connection to network management cloud platform to realize remote centralized management.

**Model Description:**

Model：C20M-BxNx

X means TDD 5G NR frequency band 41, 77 or 78

X means FDD 4G LTE frequency band 1, 2, 3, 4, 5, 7, 8, 20 or 28

**Technical Specification:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | | **Uplink** | **Downlink** |
| Frequency | LTE | Any one of band 1, 2, 3, 4, 5, 7, 8, 20, 28 | |
| NR | Any one of band NR 41, 77, 78 | |
| Band width | | Could be customized | |
| Gain | LTE | ≧ 60dB | ≧ 65dB |
| NR | ≧ 70dB | ≧ 75dB |
| Output power | LTE | ≧ 17dBm | ≧ 17dBm |
| NR | ≧ 20dBm | ≧ 20dBm |
| Ripple in band | | ≦±3dB | |
| VSWR | | ≦2dB | ≦2dB |
| Manual gain control range（MGC） | | 1~31dB @ Step of 1dB |  |
| Automatic gain control range（AGC ） | | ≧40dB | ≧40dB |
| Max input power without damage | | -10 dBm | -10 dBm |
| input intermodulation | | Fully comply with 3GPP | |
| output intermodulation | | Fully comply with 3GPP | |
| Spurious Emission | | Fully comply with 3GPP | |
| Error vector magnitude（EVM） | | LTE≦8% RMS, NR≦3.5% RMS | |
| ACRR | 5M | ≧33dB@P ≥ 31 dBm, ≧20dB @ P < 31 dBm | |
| 10M | ≧33dB@P ≥ 31 dBm, ≧20dB @ P < 31 dBm | |
| Noise figure | | ≦ 6dB | |
| Time delay |  | ≦1us | |
| TDD synchronization | | Adaptive synchronization | |
| Local maintenance | | LCD+ press buttons; Bluetooth connection mobile APP | |
| Remote monitoring | | 4G Modem, wireless connection network management cloud platform | |
| Remote Monitoring Item | | Operating temperature, Frequency, Gain, DL input level, DL output power, UL input level, UL output power, isolation, Device ID, Alarm information | |
| Remote Set item | | ALC threshold, UL and DL gain adjustment, Alarm threshold,  Factory setting. | |
| Power supply | | AC (110~220V, 20%) to DC 12V/2A | |
| Power consumption | | ≦15W | |
| RF connector | | SMA -Female | |
| Local control connector | | Micro USB | |
| Protect grade | | IP40 | |
| Heat dissipation | | Aluminum alloy radiator natural heat dissipation | |
| Shell material | | ABS | |
| Environment temperature | | -10℃ ~ 55℃ | |
| Environment humidity | | ≦ 95% | |
| Size | | 224\*160\*38mm | |
| Weight | | <1.8kg | |