



MACROLINK: OUTDOOR MACRO RRU

MA 5345

CBRS 5G Outdoor small cell sub 6 radio

OVERVIEW

MA 5345 is an outdoor O-RAN compliant radio unit; provides 5G Sub-6 radio signal transmitting, receiving, and processing functions; supporting n78, n79, or n48 CBRS band 5G NR Sub-6 outdoor radio coverage. The unit provides 4T4R and 5W/channel output power. It connects to O-DU or FHGW by O-RAN 7-2x split eCPRI interface and Lo-PHY. It supports external antennas and IP65 protection for outdoor deployment.



FEATURES

- 3GPP R15 5G NR for private and public network applications
- O-RAN 7-2x split architecture and Fronthaul interface support C/ U/ M/ S planes
- FR1/ TDD Duplex mode/OBW: 100MHz/n78, n79, or n48 SKU
- External antennas/ 4T4R, Max output power 5W/ Channel
- 1 eCPRI/10G/SPF+ interface for BBU or FHGW
- O-RAN PlugFest verified fronthaul and security/stress/stability tests
- 3GPP TS 33.511 gNodeB and TS 33.117 security requirements compliant

SPECIFICATIONS

Category	Description
Standards	3GPP TS 38.104, O-RAN Option 7-2x Category A, O-RU C/ U/ M/ S plane
Duplex mode	TDD
Frequency band	n78: 3,300MHz~3,800MHz n79: 4,800MHz~4,900MHz n48: 3,550MHz~3,700MHz
Bandwidth	100MHz
Capacity	MIMO: 4T4R
Max. transmit power	5W (37dBm) per channel
Antenna	External antenna with N-type connector
Channel raster	30KHz
Network Interface	10G SFP+ / eCPRI x1 for Fronthaul
Management	O-RAN Fronthaul M-plane Web-based EMS Northbound NetConf/ YANG RJ-45 Console port
Synchroniza-tion	1588v2/ SyncE



Signal optimization	DPD, CFR
Modulation EVM (%)	QPSK<17.5 % 16QAM<12.5 % 64QAM<8.0 % 256QAM<3.5%
ACLR	<-45dBc @100MHz <-55dBc @200MHz
Frequency accuracy	<0.1ppm
UL sensitivity	<-90dBm
spurious emissions	Spurious frequency range 9 kHz - 150 kHz<-36dBm@1KHz 150 kHz - 30 MHz<-36dBm@1KHz 30 MHz - 1 GHz<-36dBm@10KHz 1 GHz - 12.75 GHz<-30dBm@100KHz 12.75 GHz - 5th harmonic of the upper frequency edge of the DL operating band in GHz <-30dBm@1MHz
Dimension	428X316X137mm
Weight	15kg
Mount kit	Wall and pole mounting
Power supply	100~240V AC
Power consumption	150W maximum
Heat dissipation	Fanless
MTBF	>100,000 Hours
Ingress protection	IP65
Operation temperature	-40°C ~ +55°C
Operation humidity	5% ~ 95%
Information Security	3GPP TS 33.117, 3GPP TS 33.511

For details, please contact sales@nybsys.com