

Edge5000i

Outdoor gNodeB Specification



Edge5000i

5G Integrated Base Station

5W

4T4R

All-in-one Design

Clock Synchronization

The Edge5000i from edgenectar is based on advanced multi-core ARM and FPGA solutions and adopts an integrated design method of 5G BBU and RRU. Based on a completely independent research and development protocol stack and system software, it realizes a complete 5G NR wireless access, which can quickly provide users with a reliable 5G wireless coverage network.

The Edge5000i has the advantages of low power consumption, small size, convenient construction, etc., and is suitable for applications in many 5G vertical industries.



SYSTEM FUNCTIONS

Standard	3GPP R15/R16*
Number of Cells	1 x 4T4R or 2 x 2T2R*
Cell Capacity	400 RRC users per cell
Cell Throughput	DL 1.5 Gbps, UL 260 Mbps (DDDSU) DL 658 Mbps, UL 669 Mbps (DSUUU)
Operating Frequency Band	N77/N78: 3500 ~ 3800MHz; Band Customization
Channel Bandwidth	20MHz/40MHz/50MHz/ 60MHz/ 100MHz
RF Power	4*5W
Duplex Mode	TDD
Subcarrier	30 kHz
Clock Synchronization Method	GPS, 1588V2 clock synchronization
Power Supply	DC -48V or AC 220V (100V ~ 240V) (need extra power)
Power Consumption	< 230W

Note: *means the function is on roadmap

HARDWARE INTERFACE

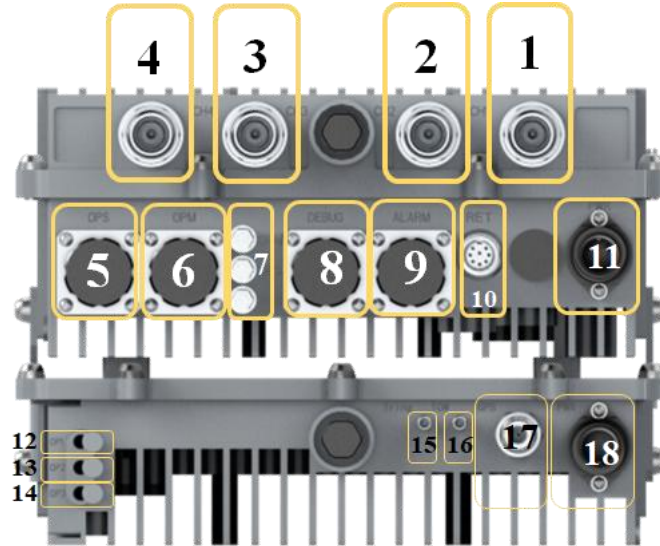
Fronthaul (Connect To Remote RRU)/Backhaul/ Cascade Interface	10G SFP+ optical port
DEBUG/RGPS Interface	Cable port
Power Input	Waterproof aviation plug
Radio Frequency Interface ANT1 -ANT4	4.3-10
GPS Antenna Connector	GPSN

STRUCTURE PARAMETERS

Total Weight	< 17 kg 28.67 lbs
Dimension	378.5 x 278.5 x 182 mm 14.90 x 10.96 x 7.17 in
Installation Method	Supports pole installation, hanging installation, wall installation

ENVIRONMENTAL SPECIFICATIONS

Protection Level	IP67
Operating Temperature	-40 °C ~ +55 °C -40 °F ~ +131 °F
Working Humidity	5% ~ 95%
Working Pressure	70kPa ~ 106kPa



INTERFACE SPECIFICATION	
1.Duplex DL/UL RF Port 1	2.Duplex DL/UL RF Port 2
3.Duplex DL/UL RF Port 3	4.Duplex DL/UL RF Port 4
5.OP Port to DU	6.OP Port to Cascade(Reserved)
7.LED Indicator of OP&System	8.RU Maintenance Port
9.External Alarm Port	10.AISG Port
11.Power Socket of RU	12.OP1 Port of DU
13.OP2 Port of DU	14.OP3 Port of DU
15.Tring for Debug	16.10M SMA for Debug
17.GPS Port N Type	18.Power Socket of DU