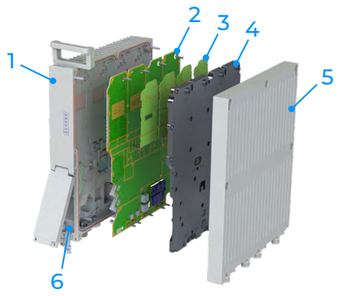
O-RAN Literature

PROSE

Radio Product Platform

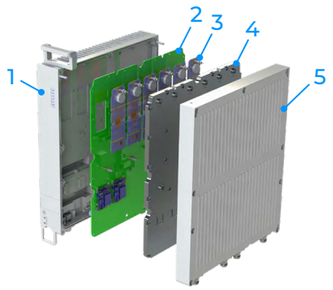
4T4R

Item	Module	Description
1	Heatsink	Cooling
2	Main board	PSU, FPGA, Transceiver, RF
3	PA Board	LDMOS/GaN 28V/48V
4	Shield Cover	Shielding
5	Duplexer	High Q, Low insertion loss
6	Operation window	SFP, POWER interface



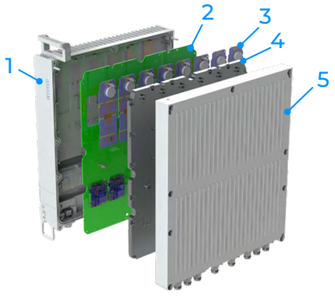
4T4R dual band

Item	Module	Description
1	Heatsink	Cooling
2	Main board	PSU, FPGA, Transceiver, RF
3	PA Board	LDMOS/GaN 28V/48V
4	Shield Cover	Shielding
5	Duplexer	High Q, Low insertion loss



8T8R

Item	Module	Description
1	Heatsink	Cooling
2	Main board	PSU, FPGA, Transceiver, RF
3	PA Board	LDMOS/GaN 28V/48V
4	Shield Cover	Shielding
5	Duplexer	High Q, Low insertion loss



Highlights

Platform Design

- Modular and compatible with multi-band (Through BOM change) and multi-technology (Software upgrade)
- Quick response on the customer requirements

Mechanical Design

-Smaller and Lighter
-4T4R/SBP: 13L/15KG
-8T8R/MBP: 25L/25KG

① PA sub board adopts creative technology, which occupies compact PCB area

② Integrated board-to-board design, simple process

③ FPGA heat dissipation adopts soaking design and VC soaking plate process

GaN+DPD

-30%~35% overall efficiency

① GaN is >5% more efficient than traditional LDMOS

② GaN supports larger bandwidth than traditional LDMOS, and can be used as a wider band or multi band device

③ Integrated power supply high efficiency, up to 94%

RFSOC+DFE

① The total FPGA power is reduced by 50%

② Integrated hard IP, simplified design

③ Multi-Band, Multi-Mode Operation for Flexibility and Scalability

④ Complete Adaptive SOC for Software-Defined Radio

Cavity Filter & Antenna

① Low insertion loss

② High out of band suppression

③ High output power

④ Low intermodulation

⑤ Good frequency Selectivity

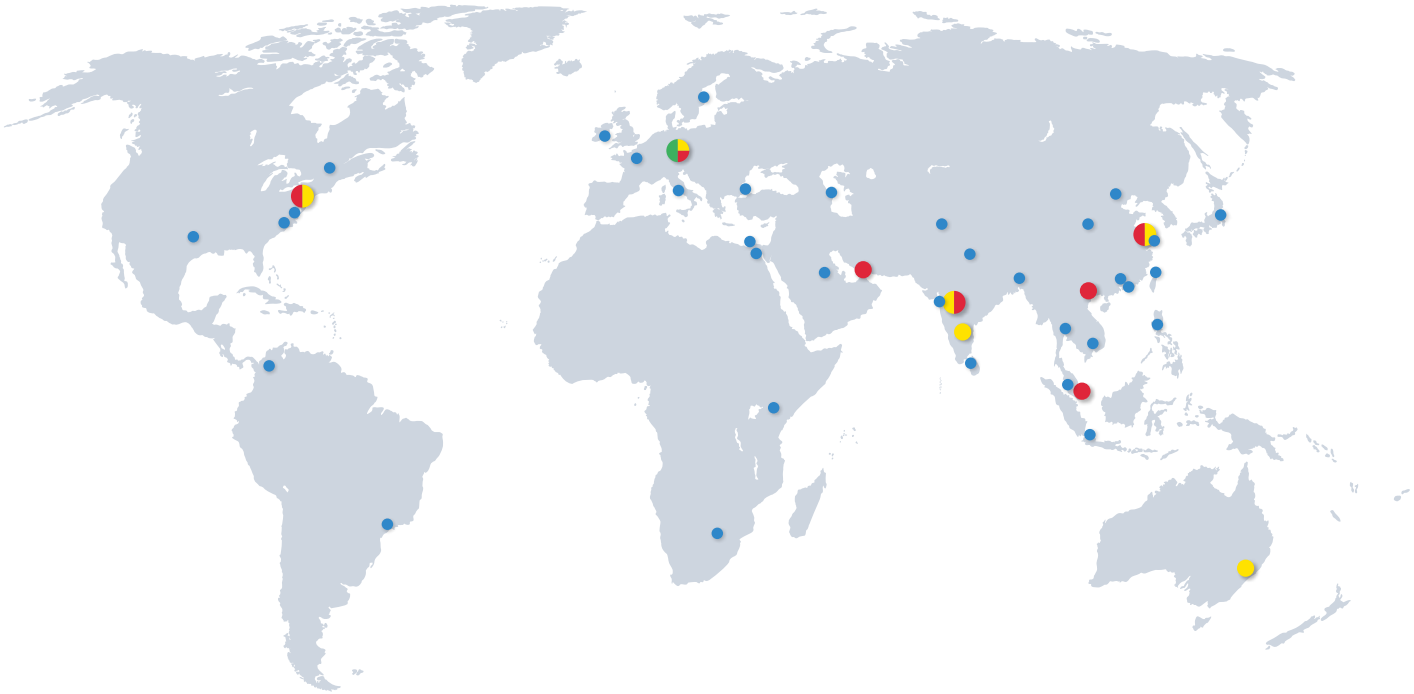
⑥ Antenna Integration

Power Consumption

Part Number	100% load	50% load	30% load	10% load	Remark
ORU-46-Q1-LN-64F-D-01	518W	320W	286W	219W	
ORU-46-Q7-LN-64F-D-01	504W	383W	315W	215W	
ORU-46-Q3-LN-64F-D-01	513W	315W	281W	214W	
ORU-46-Q40-LN-64F-D-01	374W	250W	227W	180W	DL:UL 70:30
ORU-46-Q40UK-LN-64F-D-01	374W	250W	227W	180W	DL:UL 70:30
ORU-46-Q41-LN-64F-D-01	375W	251W	226W	181W	DL:UL 70:30
ORU-46-O78L4-LN-64F-D-01	1010W	674W	575W	399W	DL:UL 75:25
ORU-46-Q1Q3-LN-64F-D-01	994W	638W	505W	326W	

- The power consumption of ORRU under different loads is simulated by the output of different power levels, such as 4*40W output power for 100% load and 4*20W output power for 50% load.
- The typical power consumption and the maximum power consumption are measured when The ORRU works at a temperature of 25°C.

GLOBAL FOOTPRINT



- HQ
- PRODUCTION / OPERATIONAL HUB
- R&D CENTER
- SUBSIDIARIES / SALES REPRESENTATIVES

For more information refer to our website:
www.ProseTechnologies.com

PROSE

PROSE Technologies
www.ProseTechnologies.com

01/25