

# ORU-4402

## Outdoor Open Radio Unit



- ★ **4T4R MIMO**  
100 MHz BW
- ▲ **EIRP 43 dBm**  
+ Antenna Gain
- ⚡ **IP67 Rated**  
Full Outdoor
- ❄️ **-40 ~ 55 °C**  
Wide Temp Range
- ♻️ **< 110W Power**  
Low Consumption
- 📍 **GPS Option**  
Timing Sync

## Overview

The ORU-4402 5G O-RU is an O-RAN-compliant radio unit designed for 5G Sub-6 transmission, reception, and baseband processing, delivering a total output power of up to 20 W.

This unit supports the n77, n78, n79, n48, and n41 frequency bands and features a 4T4R architecture with 5 W output power per channel. It connects to an O-DU or FHGW through an O-RAN 7.2 split eCPRI interface with Low-PHY. Featuring external antennas and IP67 protection, the ORU-4402 ensures reliability and durability in demanding outdoor environments.

## Features

- 3GPP 5G NR Release 17
  - Mini-Slot
  - RedCap
  - O-RAN Compliant C/U/S/M-Plane
- O-RAN Compliance Category A, Split 7.2a
- 4T4R MIMO with 100 MHz Bandwidth
- Support DL/UL up to 256 QAM with 15 kHz and 30 kHz Tone Spacing
- Global Frame Structure Including Japan Local 5G
- Max EIRP: 43 dBm (4TR MIMO) + Antenna Gain
- Timing Synchronization supports both PTP and SyncE
- Frequency Support - N78/N79/N77/N48/N41
- Built-in GNSS for GM (Optional)

**Wireless Technology**

3GPP 5G NR Rel. 17 - Mini-Slot、RedCap、O-RAN Compliant Category A, Split 7.2a, C/U/S/M-Plane  
4T4R MIMO with 100 MHz Bandwidth, Operation in TDD Mode  
Support DL/UL up to 256 QAM with 15 kHz and 30 kHz Tone Spacing  
Global Frame Structure Including Japan Local 5G

**Frequency Band**

N78 (3.3 ~ 3.8 GHz), N79 (4.4 ~ 5.0 GHz), N77 (3.3 ~ 4.2 GHz), N48 (3.55 ~ 3.7 GHz), N41 (2.469 ~ 2.69 GHz)

**RF Power**

Max Tx Power 20 W per radio (5 W (37 dBm) per channel)  
Max EIRP 43 dBm (4TR) + Antenna Gain

**Throughput**

DL PHY Rate: 1.5 Gbps

**Antenna**

4 N-Type antenna connectors

**Timing Synchronization**

PTP: ITU-T 8275.1, 8275.2, IEEE 1588v2; ITU-T 8273.2 Class C; SyncE: ITU-T G.8262

**External Interfaces**

LED Indicator for Power and Operation Status  
1 x 10G BASE-T RJ45 - Data w/ 802.3bt PoE++ Type-4 PD  
1 x 10G SPF+ Port (Fronthaul eCPRI)  
1 x N-type GNSS port (Optional)

**Power Supply**

36V ~ 60V DC in  
Power Consumption: < 110 W Typical

**Environmental**

Operation Temperature: -40 C° to +55 C°  
Ingress Protection: IP67

**Mounting Type**

Pole-mount

**Enclosure Dimension**

365 mm x 310 mm x 120 mm  
10 Liters / 8.5 KG