



# ORU-4401

## Semi-outdoor Open Radio Unit



- ★
**4T4R MIMO**  
100 MHz BW
- ▲
**EIRP 38 dBm**  
8 dBi Ant. Gain
- ↔
**Swappable Ant.**  
Internal / External
- ⚡
**IP65 Rated**  
Semi-Outdoor
- ♻️
**< 30 W Power**  
Low Consumption
- ★
**Zone 2**  
Ex-proof Option

## Overview

The ORU-4401 is an O-RAN 7.2 split-compliant 5G O-RU designed to support Sub-6 radio transmission, reception, and processing, with a total output power of up to 1 W. Its compact and lightweight design makes it well suited for dense deployment scenarios.

This unit supports the n77, n78, n79, n48, and n41 frequency bands and features a 4T4R architecture with 250 mW output power per channel. It supports both internal and external antennas with cold-swappable capability, provides IP65-rated protection, and offers an optional Zone 2 explosion-proof design to ensure reliable and resilient performance in semi-outdoor deployments.

## 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: 38 dBm (4TR with 8 dBm Internal Antenna Gain)
- Swappable Antenna Mode (Internal/External)
- Timing Synchronization supports both PTP and SyncE
- Frequency Support - N78/N79/N77/N48/N41
- 802.3bt PoE++ Type-4 PD

**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 1W per radio (250mW (24dBm) per channel)  
Max EIRP 38 dBm (4TR with 8 dBm Internal Antenna Gain)

**Throughput**

DL PHY Rate: 1.5 Gbps

**Antenna**

4 embedded antennas for internal mode  
4 N-Type antenna connectors for external mode (Optional)  
Swappable Antenna Mode (Internal/External)

**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)  
4 x N-type antenna ports (Optional)

**Power Supply**

12V DC in with AC to DC adapter (US/UK Plug)  
802.3bt PoE++ Type-4 PD  
Power Consumption: < 30 W typical

**Environmental**

Operation Temperature: -40 C° to +55 C°  
Ingress Protection: IP65

**Mounting Type**

Ceiling-mount and Wall-mount

**Enclosure Dimension**

230 mm x 230 mm x 65 mm  
3.5 Liters / 3 KG

**Other**

Zone 2-level Explosion-proof (Optional)