



OTD6710

High-Performance IP67 Industrial Enclosure with Integrated Cooling and Flexible Antenna Options



INTRODUCTION

The OTD6710 is a ruggedized, next-generation waterproof enclosure designed for 4G/5G industrial routers or gateways, designed to balance environmental protection, thermal dissipation, and RF connectivity for outdoor deployments.

Thermal Efficiency: Features a built-in heavy-duty aluminum heat sink. This integrated thermal solution ensures stable operation of high-power 4G/5G routers or gateways by efficiently dissipating heat, helping reduce the risk of thermal throttling during high-load operation.

UV-Stable Enclosure Material: Engineered with UL 746C F1-rated PC 945U resin, providing superior UV resistance and flame retardancy for long-term outdoor durability.

Advanced RF Capabilities:

- **External Antennas:** The enclosure provides up to 4 N-type antenna ports with internal pigtailed customizable (SMA or RP-SMA) to perfectly match the device's antenna specifications. This ensures optimal signal integrity for LoRa, cellular and Wi-Fi networks. The 4 N-type ports support high-gain external fiberglass antennas for superior signal range.
- **Internal Antennas:** Supports up to 6 internal PCB antennas (4x 4G/5G + 2x Wi-Fi) for a clean, integrated aesthetic.

Reliable Sealing Architecture: The hinge-connected enclosure is secured by dual-side quick-release buckles and front reinforcement screws, achieving a hermetic IP67 seal while allowing for easy on-site access.

Integrated Vent Valve: Features a built-in waterproof breather valve to balance internal/external air pressure and eliminate condensation, protecting sensitive electronics from moisture buildup.

Comprehensive Connectivity: Supports up to 4 waterproof glands M16/M22 for Power, Serial, and RJ45 cables. Suitable for Robustel's R1520, R1520LG, R5010, R5020 Lite, R5020 and R5030.

KEY FEATURES

- IP67 Enclosure
- Built-in heavy-duty aluminum heat sink
- Built-in waterproof breather valve
- Up to 4 N-type antenna connectors
- Up to 6 internal PCB antennas (4 x 4G/5G and 2 x Wi-Fi)
- Up to 4 waterproof glands, 2 x M16, 2 x M22
- Wall mounting and pole mounting support
- Suitable for R1520, R1520LG, R5010, R5020 Lite, R5020 and R5030

APPLICATION EXAMPLE



SPECIFICATIONS

Cable Glands

M16 Cable Gland

Number of ports	Optional, Max 2, for power and serial cables
Clamping range	6–8 mm, Cable outer diameter (O.D.)

M22 Cable Gland

Number of ports	Optional, Max 2, for Ethernet
Clamping range	6–8 mm, Cable outer diameter (O.D.)

Antenna Ports

External Antennas

Number of ports	Optional, Max 4
Connector	N-type, SMA to N-type or RP-SMA to N-type
Others	Need to be used in conjunction with an external fiberglass antenna

Internal Cellular

Number of antennas	Optional, Max 4
Connector	SMA
Frequency	700–960 MHz 1710–5000 MHz
Gain (max)	7.0 dBi@700-960 MHz 6.1 dBi@1710-5000 MHz
Others	50 Ohm, Omni-directional, Linear

Internal Wi-Fi Antennas

Number of antennas	Optional, Max 2
Connector	RP-SMA
Frequency	2.4–2.5 GHz (2.4 GHz ISM band) 5.15–5.85 GHz (5 GHz ISM band)
Gain (max)	5.5 dBi@2.4–2.5 GHz 4.6 dBi@5.15–5.85 GHz
Others	50 Ohm, Omni-directional, Linear

Mechanical

Dimensions (W x D x H)	258.5 x 197.4 x 95 mm
Weight (N.W.)	Approx. 1.7 kg (Variations by configuration)
Mounting	Wall mounting and pole mounting
Material	PC 945U (UL 746C F1-rated) UL94-V0
Thermal System	Built-in aluminum heat sink 156 x 75 x 14 mm
Waterproof Vent Valve	Built-in

Environment

Operating temperature	-40 to +75 °C*
Storage temperature	-40 to +85 °C
Relative humidity	5–95% RH (non-condensing)

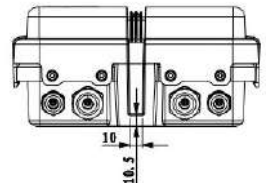
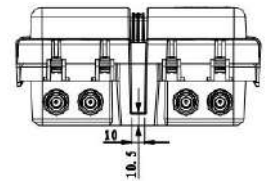
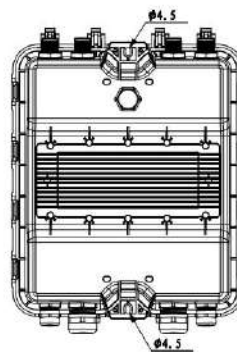
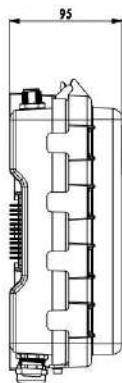
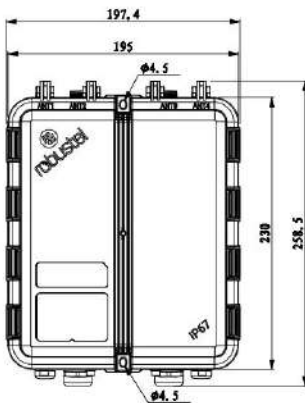
Regulatory and Type Approvals

IP rating	IP67
IK rating	IK08
Environmental	RoHS2.0*

NOTE:

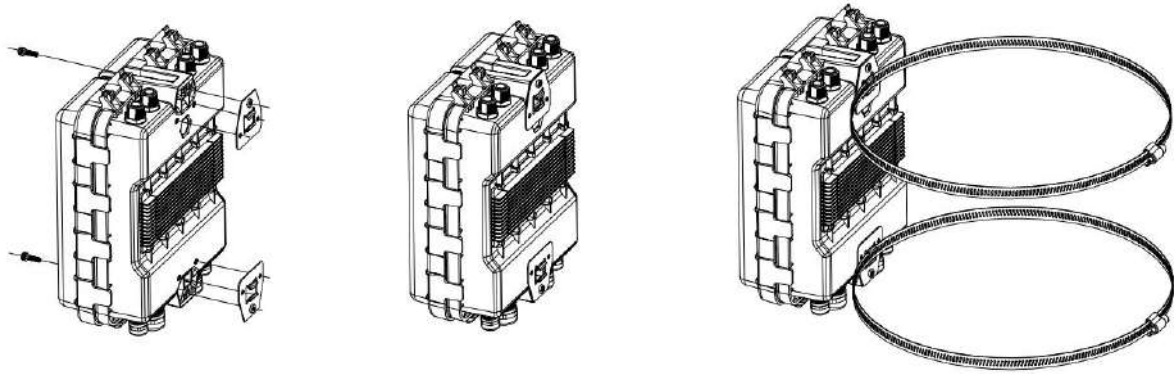
1. When the router is operating inside a waterproof enclosure, expect an internal temperature rise of approximately 10°C above ambient.
2. Approvals are Pending.

DIMENSIONS (MM)



INSTALLATION

Engineered for both wall mounting and pole mounting. The following figure shows the installation diagram of the pole mounting. For pole mounting, 22mm-wide clamps are required and must be provided by the customer based on actual installation needs.



ORDERING INFORMATION

Model	Order Code	Internal Cellular Antennas	Internal Wi-Fi Antennas	Internal pigtail	Cable Glands	Package Contents	Suitable For
OTD6710-A2410	S000200007	2	2	1x RP-SMA to N-type	2 x M16 2 x M22	1 x OTD6710-A2410 1 x E000630228	R1520/R1520LG
OTD6710-A2600	S000200008	4	2	0	2 x M16 2 x M22	1 x OTD6710-A2600	R5020 Lite
OTD6710-B2600	S000200009	4	2	0	2 x M16 2 x M22	1 x OTD6710-B2600 1 x E000630228	R5020/R5030
OTD6710-C1402	S000200010	4	0	0	1 x M16 1 x M22	1 x OTD6710-C1402 1 x E000630228	R5010

ACCESSORIES (OPTIONAL)

Item	PN	Description
External Antenna	E000330244	LoRa IP67 Fiberglass antenna, Φ20×360mm, N-Male,850-950MHz 2.5dBi
	E000330245	Wi-Fi IP67 Fiberglass antenna, Φ20×200mm, N-Male,4.7 dBi@2.412-2.472 GHz,3.6 dBi@5.15-5.825 GHz
	E000330246	Cellular IP67 Fiberglass antenna,Φ20×200mm, N-Male,3.9 dBi@617-960MHz,8.4 dBi@1710-4900MHz

NOTE:

1. For more information, please contact us.