



Data Sheet

W4005-5GB



Designed for fixed locations that require the highest performance of 5G and the flexibility of wireless, the Cradlepoint W4005-5GB is a key member of the W-Series 5G wideband adapter family that will usher in the next generation of Wireless WAN networking. The W-Series is designed to accommodate the diverse spectrums, multiple generations, and breadth of new technologies introduced in 5G while delivering enterprise-class standards of scalability, comprehensive management, and security.

Notable Benefits

- Increase the size and types of your WAN use cases with 5G performance
- Experience the dependability of dual connectivity with simultaneous 5G and 4G connections
- Gain carrier-class connectivity using a software-defined modem and integrated multilevel test and recovery utilities
- Deploy an enterprise-class 5G solution with greater simplicity and confidence with the wizard-based installation application
- Manage the Cradlepoint router and 5G adapter as one entity for singular control and visibility
- Evaluate the benefits of your 5G service with value confirmation tools built into the NetCloud Platform
- Deploy within any existing networking or SD-WAN environment

High Performance Wideband

The W4005-5GB 5G Wideband Adapter is purpose-built for deployment in the high-capacity (mmWave) layer, as well as the capacity and coverage layers. To address the tradeoff of lower propagation in the high-capacity layer, Cradlepoint designed the W4005-5GB to be placed on the outside of buildings for optimal signal reception.

Designed for Enterprise-Class Business

While the performance of 5G is top of mind, the W-Series was also designed with enterprise-class standards for high scalability, comprehensive management, and security. Because 5G is a collection of new spectrum, new technologies, and new network infrastructure that is rolling out over several years, the Cradlepoint 5G edge networking service and endpoints accommodate the diverse deployments of an organization with hundreds or even tens of thousands of sites.

Performance

IP Passthrough
Mode Throughput:

2.0 Gbps

Standard NAT
Mode Throughput:

2.0 Gbps

Captive Modem
Mode Throughput:

2.0 Gbps

Performance testing was conducted based on requirements as defined in RFC2544 using fixed-frame 1518 byte packets. Throughput results reflect uni-directional UDP traffic with less than 1% packet loss as tested with wired connections.

Results do not reflect performance of the cellular wireless operator networks.

Hardware Specifications

The following features are delivered through the hardware.

INTERFACES	
Modem:	Embedded 5G NR FR1 and FR2 low-, mid-, high-band and 4G LTE Category 20 modem
Ethernet:	2 x 2.5 GbE RJ45 (LAN/WAN switchable)
Wi-Fi:	Single band 2.4 GHz <ul style="list-style-type: none"> — Endpoint setup only — 2 x 2 MU-MIMO 802.11ax Wi-Fi 6 — External 2 x 2 antennas — Global Safe Mode
Expansion / Console:	N/A
GNSS / GPS:	1 x GNSS Muxed to Aux:L1, and MIMO2:L5
ENVIRONMENTAL	
Temperature:	Operating: -22 °F to 140 °F (-30 °C to 60 °C) Storage: -40 °F to 185 °F (-40 °C to 85 °C)
Humidity:	Operating: 0% to 100% Storage: 0% to 100%
Ingress Protection:	IP67 Rated (water and dust tight)
Wind / Shock Rating:	134 MPH sustained wind rating

POWER	
Power Required:	PoE++ <ul style="list-style-type: none"> — PoE power injector included — 802.3bt PSE Type 4 (90W)
PHYSICAL	
Size:	12.72 x 11.8 x 3.11 in (323 x 300 x 79 mm)
Weight:	11 lb 9.6 oz (5.26 kg)
CERTIFICATIONS	
Safety:	UL/CUL, CB Scheme
Materials:	WEEE, RoHS3
LEDs	
Refer to the W4005 5G Wideband Adapter Quick Start Guide .	

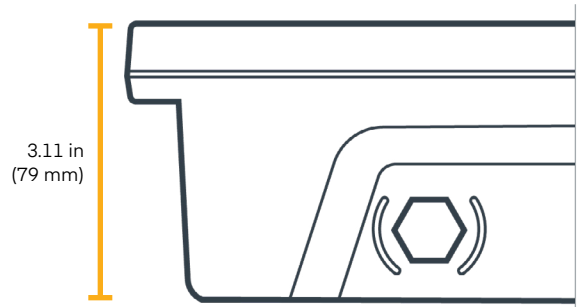
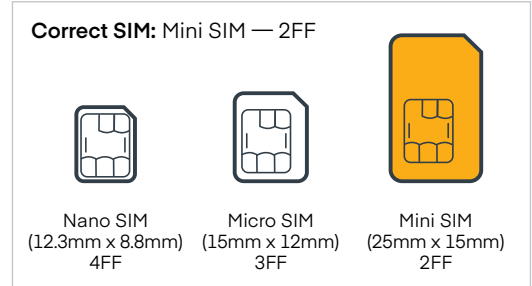
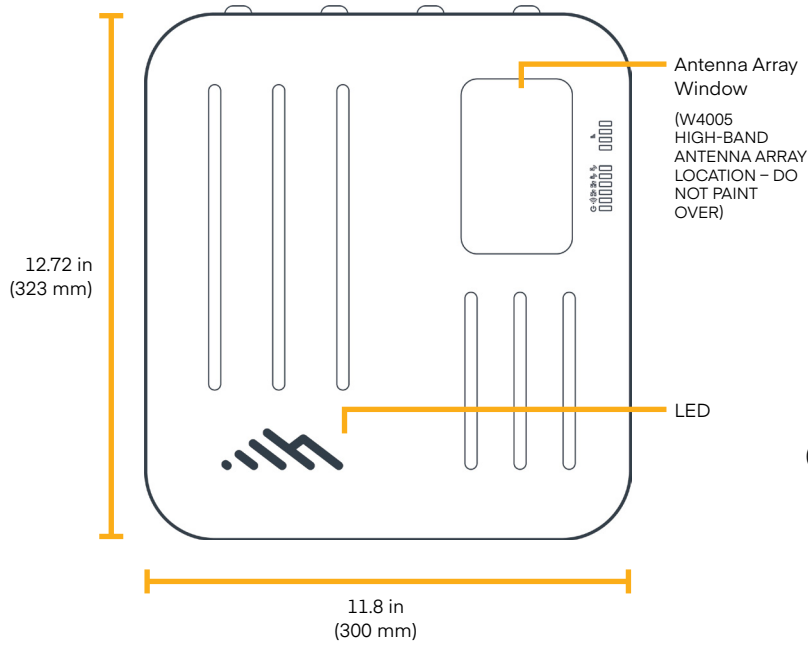
Enterprise-Class Modem Specifications

SPECIFICATION	W4005-5GB — OUTDOOR
Technology:	5G NR (low/mid-band FR1, high-band FR2) & 4G LTE Category 20 LTE Advanced Pro with Dual Connectivity — Dual SIM slots, mini 2FF form factor
Carrier Aggregation:	LTE only; up to 7CA downlink, 2CA uplink ENDC 5G + LTE; downlink & uplink supported. Refer to modem carrier aggregations article
Peak Downlink Rates:	Up to 7.53 Gbps — based on 20 Layers LTE + TDD (100 MHz BW, 256 QAM, 4x4)
Peak Uplink Rates:	Up to 1.6 Gbps — based on 2 Layers LTE + TDD (200 MHz BW, 64 QAM, SISO)
MIMO:	4x4 MIMO
QAM:	Up to 256 — FR1 Up to 64 — FR2
LTE Bands:	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71
5G NR Bands:	n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79, n260, n261
WCDMA Bands:	B1, B2, B3, B4, B5, B6, B8, B9, B19
Power:	LTE only; 23 dBm ± 1 (typical conducted) ENDC 5G + LTE; 20 dBm ± 1 (typical conducted)
Antennas:	Low/mid-band FR1 5G & LTE — N-type female connectors, external 600 MHz - 6 GHz cellular paddle antennas (qty 4, included) High-band FR2 5G — Internal 27.5-28.35 GHz, 37-40 GHz high-power antenna array (8x8 included)
SMS:	Yes
Regulatory:	FCC (U.S.), IC (Canada), CE (EU), RCM (AU/NZ)
Required Carrier Certifications*:	PTCRB (U.S., Canada), GCF (Worldwide)
Network Operator Certifications*:	AT&T, Verizon

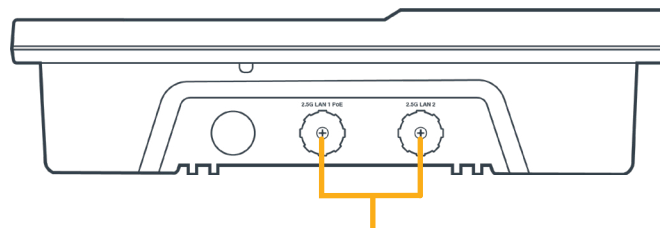
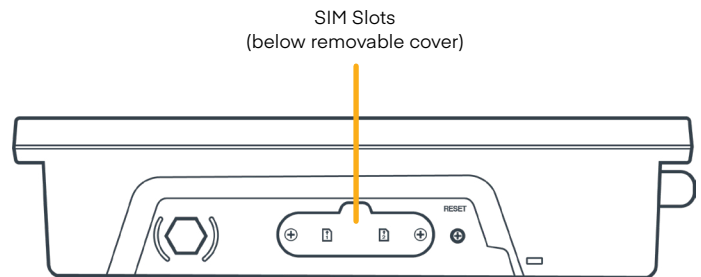
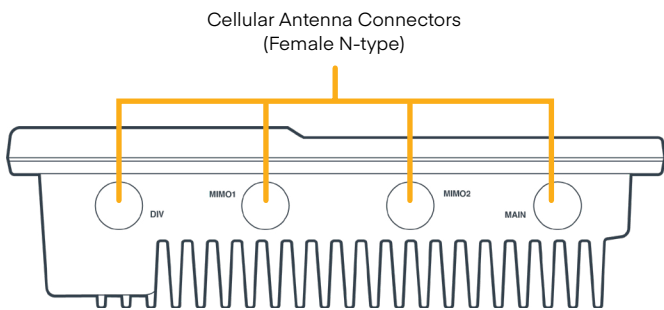
* Cellular carriers and operators throughout the world may only require telecom industry certifications, like PTCRB or GCF, to operate on their network. Some carriers require additional testing and approval, beyond telecom certifications, to operate on their network. A carrier listed in the approvals section means Cradlepoint completed additional testing and acquired technical approval for that given carrier. Any carrier not listed may not require additional testing or approval beyond telecom industry certifications to operate on their network.

Hardware

Physical Measurements



Sides



2.5 Gigabit Ethernet (GbE) Ports with Waterproof Gland Assembly

Ordering Guide

NetCloud Branch 5G Adapter Essentials + Advanced packages and plans full featured for 5G performance and connectivity. Essentials + Advanced packages include 24x7 support (phone support: 24 hour weekdays with emergency response on weekends, web: 24x7, chat: 24x5) and a limited lifetime warranty.

See additional details of what is included in the Essentials + Advanced NetCloud software: cradlepoint.com/netcloud-service

For more details on the W-Series Adapters, included with the Essentials + Advanced Packages, see below.

NetCloud Package and Plans

REGION	DESCRIPTION	PART NUMBER
North America: U.S. & Canada	NetCloud Branch 5G Adapter Essentials Plan, Advanced Plan, and W4005 Outdoor Adapter (5GB modem), NA	BEAx-40055GB-GN
All Regions:	Renewal NetCloud Branch 5G Adapter Essentials Plan and Advanced Plan	BEAx-NCEA-R

x = 1, 3, or 5 years

Accessories

INCLUDED	PART NUMBER
W4005-5GB Outdoor 5G Wideband Adapter	
— 802.3bt 90 W PoE Injector	N/A
— Cellular antenna, outdoor 5G Low/Mid Band with N type connector (Qty. 4)	N/A
— Outdoor mounting plate	N/A
— Pole mount clamp	N/A
— Plate to assembly mounting screws & washers	N/A
— Plate to W4005 mounting screws	N/A

Support & Warranty

The W-Series Adapters are only sold as components of Branch 5G Adapter Essentials + Advanced Packages.

- NetCloud Packages include support for the full subscription term.
- All Cradlepoint hardware products are covered by a limited lifetime warranty for as long as they have a subscription license to an active NetCloud Service Plan.