

# Data Sheet

# W2005 Series

# 5G Wideband

# Adapter



Designed for fixed locations that require the higher performance of 5G and the flexibility of wireless, the Cradlepoint W2005-5GB 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 W2005-5GB 5G Wideband Adapter is purpose-built for outdoor deployment in the coverage and capacity spectrum layers. To address the tradeoff of lower propagation in the capacity layer, Cradlepoint designed the W2005-5GB 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	
<b>Modem:</b>	Embedded 5G NR FR1 low-, mid-band, and 4G LTE Category 20 modem
<b>Ethernet:</b>	2 x 2.5 GbE RJ45 (LAN/WAN switchable)
<b>Wi-Fi:</b>	Single band 2.4 GHz <ul style="list-style-type: none"> <li>— Endpoint setup only</li> <li>— 2 x 2 MU-MIMO 802.11ax Wi-Fi 6</li> <li>— External 2 x 2 antennas</li> <li>— Global Safe Mode</li> </ul>
<b>GNSS / GPS:</b>	GNSS Muxed to DIV0:L1, and MIMO2:L5
ENVIRONMENTAL	
<b>Temperature:</b>	Operating: -30 °C to 70 °C (-22 °F to 158 °F) Storage: -40 °C to 85 °C (-40 °F to 185 °F)
<b>Humidity:</b>	Operating: 10% to 90% Storage: 5% to 95%
<b>Ingress Protection:</b>	IP67 (dust tight and water emersion up to 1 meter)
<b>Wind / Shock Rating:</b>	134 MPH sustained wind rating

POWER	
<b>Required:</b>	PoE++ <ul style="list-style-type: none"> <li>— PoE power injector included</li> <li>— 802.3bt PSE Type 4 (100 W)</li> </ul>
<b>Consumption:</b>	— 802.3bt Class 8 PD (90 W)
PHYSICAL	
<b>Size:</b>	323 x 300 x 79 mm (12.72 x 11.8 x 3.11 in)
<b>Weight:</b>	4.9 kg (10 lb 12.8 oz)
CERTIFICATIONS	
<b>Safety:</b>	UL/cUL, CB Scheme
<b>Materials:</b>	WEEE, RoHS3
LEDs	
Refer to the <a href="#">W2005 Outdoor 5G Wideband Adapter Quick Start Guide</a> .	

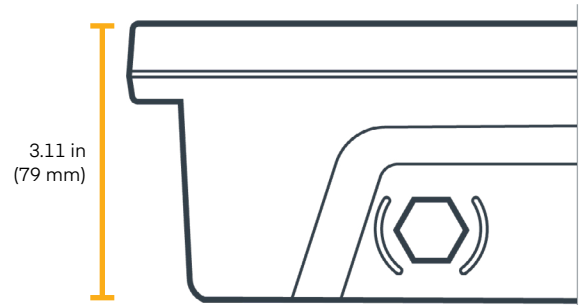
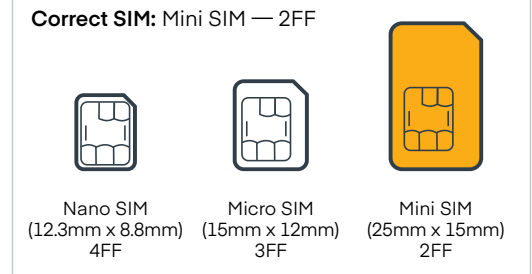
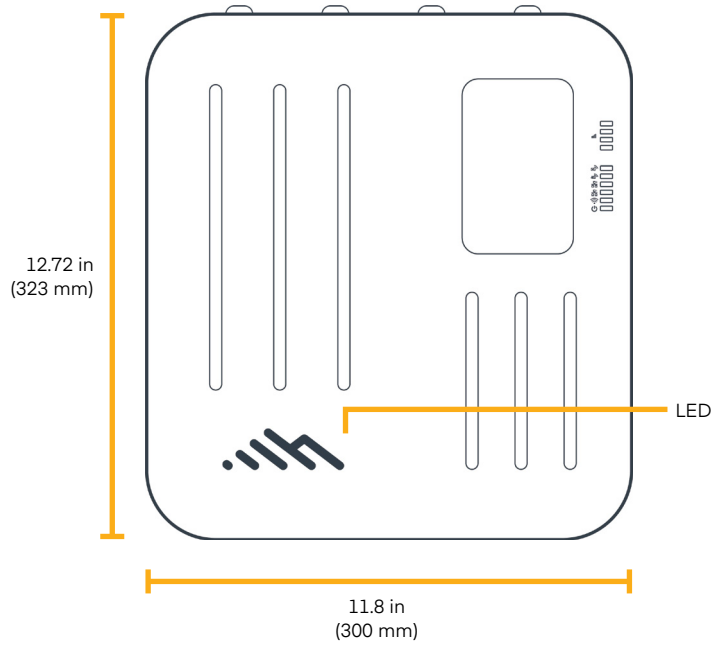
# Enterprise-Class Modem Specifications

SPECIFICATION	W2005-5GB — OUTDOOR	
<b>Technology:</b>	5G NR (low/mid-band FR1) and 4G LTE Category 20 LTE-Advanced Pro with Dual Connectivity — Dual SIM slots, mini 2FF form factor	
<b>Carrier Aggregation:</b>	LTE only; up to 7CA downlink, 2CA uplink ENDC 5G + LTE; downlink and uplink supported. Refer to the <a href="#">Modem Carrier Aggregations</a> article.	
<b>Peak Downlink Rates:</b>	Up to 4.14 Gbps — based on 20 Layers LTE + TDD (100 MHz BW, 256 QAM, 4x4)	
<b>Peak Uplink Rates:</b>	Up to 660 Mbps — based on 2 Layers LTE + TDD (100 MHz BW, 256 QAM, SISO)	
<b>MIMO:</b>	4x4 MIMO	
<b>QAM:</b>	Up to 256 — FR1	
<b>4G/LTE Bands:</b>	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, B46, B48, B66, B71	
<b>5G NR Bands:</b>	Firmware 01.07.xx n1, n2, n3, n5, n28, n41, n66, n71, n77, n78, n79	Firmware 03.09.03 — n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n66, n71, n77, n78, n79
<b>3G Bands:</b>	B1, B2, B3, B4, B5, B6, B8, B9, B19	
<b>Power:</b>	LTE only; 23 dBm ± 1 (typical conducted) ENDC 5G + LTE; 20 dBm ± 1 (typical conducted)	
<b>Antennas:</b>	N-type female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 4, included)	
<b>GNSS:</b>	Passive GNSS (multiplex with DIV0/MIMO2 antenna ports)	
<b>SMS:</b>	Yes	
<b>Regulatory:</b>	FCC (U.S.), IC (Canada), CE (EU), RCM (AU/NZ)	
<b>Required Carrier Certifications*:</b>	PTCRB (U.S., Canada), GCF (Worldwide)	
<b>Network Operator Certifications*:</b>	AT&T, T-Mobile, Verizon	

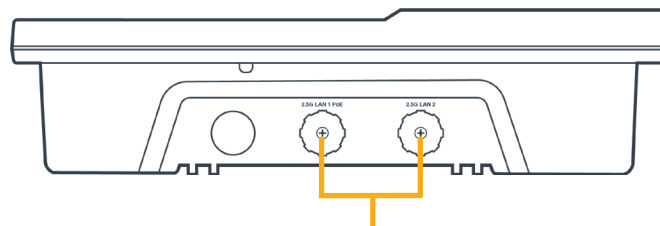
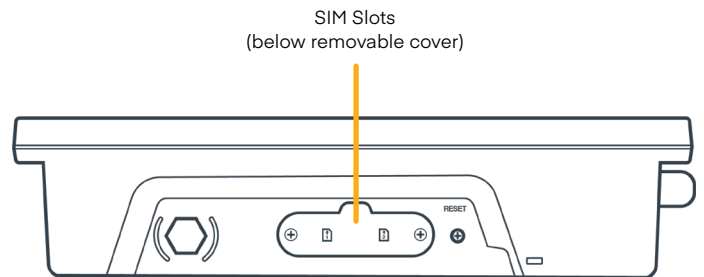
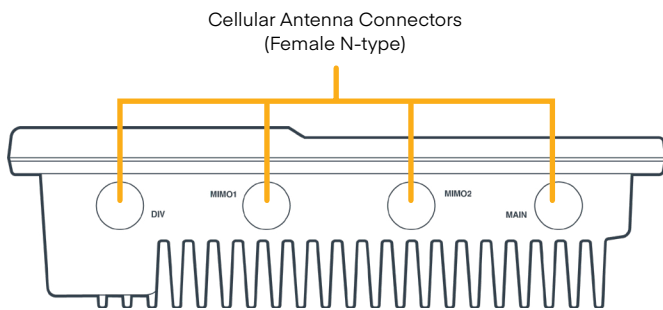
\* Cellular carriers and operators throughout the world may only require telecom industry certifications, like PTCRB or GCF, to operate on their network. Some carriers require additional testing and approval, beyond telecom certifications, to operate on their network. A carrier listed in the approvals 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](https://cradlepoint.com/netcloud-service)

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

## NetCloud Package & Plans

REGION	DESCRIPTION	PART NUMBER
<b>North America:</b> U.S. & Canada	NetCloud Branch 5G Adapter Essentials Plan and W2005 Outdoor Adapter (5GB modem), NA	BE0x-20055GB-GN
	NetCloud Branch 5G Adapter Essentials Plan, Advanced Plan, and W2005 Outdoor Adapter (5GB modem), NA	BEAx-20055GB-GN
<b>United States:</b> Federal Government	TAA Compliant NC Branch 5G Adapter Essentials Plan, Advanced Plan, and W2005 Outdoor Adapter (5GB modem), NA	TAA-BEAy-20055GB-GN
<b>Europe:</b> European Union (EU), United Kingdom (UK)	NetCloud Branch 5G Adapter Essentials Plan and W2005 Outdoor Adapter (5GB modem), EU	BE0x-20055GB-GE
	NetCloud Branch 5G Adapter Essentials Plan, Advanced Plan, and W2005 Outdoor Adapter (5GB modem), EU	BEAx-20055GB-GE
	NetCloud Branch 5G Adapter Essentials Plan and W2005 Outdoor Adapter (5GB modem), UK	BE0x-20055GB-GU
	NetCloud Branch 5G Adapter Essentials Plan, Advanced Plan, and W2005 Outdoor Adapter (5GB modem), UK	BEAx-20055GB-GU
<b>Asia Pacific:</b> Asia-Pacific (AP), Australia, & New Zealand (NZ)	NetCloud Branch 5G Adapter Essentials Plan and W2005 Outdoor Adapter (5GB modem), AP	BE0x-20055GB-GP
	NetCloud Branch 5G Adapter Essentials Plan, Advanced Plan, and W2005 Outdoor Adapter (5GB modem), AP	BEAx-20055GB-GP
<b>All Regions:</b>	Renewal NetCloud Branch 5G Adapter Essentials Plan and Advanced Plan	BEAx-NCEA-R

*x = 1, 3, or 5 years*

*y = 3 or 5 years*

## Accessories

INCLUDED	PART NUMBER
<b>W2005-5GB Outdoor 5G Wideband Adapter</b>	
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 W2005 mounting screws	N/A
OPTIONAL	PART NUMBER
PoE Injector, 56 V, 0.8 A, 90 W, single port 2.5 GbE 802.3bt	170827-000

## 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.

**[Find the most up-to-date information at cradlepoint.com/w2005](https://www.cradlepoint.com/w2005)**