

Data Sheet

W1855 Series 5G Wideband Adapter

2023 - 05 - 08

Designed for branches that require the higher performance of 5G and the flexibility of wireless, the Cradlepoint W1855-5GC Wideband Adapter ushers 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.

High Performance Wideband

The W1855-5GC adapters are purpose-built for deployment in the new high-performance low-, mid-band 5G spectrum. To address the tradeoff of lower propagation, Cradlepoint designed the W-Series adapter to be placed separately from the router for optimal signal reception. The stylized W1855-5GC Adapter is designated for optimal outdoor placement.

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.

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
- Reduce truck rolls with advanced Out-of-Band Management
- Deploy within any existing networking or SD-WAN environment



[Product Page](#)



[NetCloud Service](#)



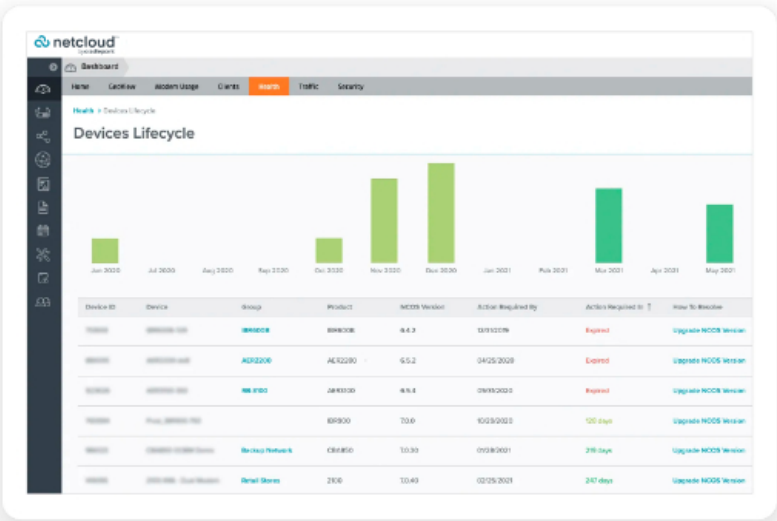
[Quick Start Guide](#)

Carrier-Class Connectivity

Although each network operator conforms to 3GPP standards, they implement those standards differently to gain optimal efficiency and performance from their network. Additionally, software from modem manufacturers is designed to serve multiple operators within broad markets. The W-Series uses a customized software-defined modem, pre-programmed endpoints, and multilevel integrity testing to predict vulnerable connections and deliver carrier-class connectivity.

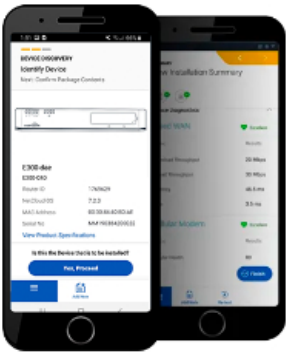
5G Spectrum Solutions

The W-series portfolio supports all spectrum layers ensuring that organizations have the right solution for every location. The W1855 5GB adapter supports low- and mid-band layers.



Support for a Full Range of Cellular Technologies

Cradlepoint 5G solutions support all cellular generations, from 4G LTE to Gigabit-Class LTE to 5G — with the ability to gracefully transition tens of thousands of sites between generations as technology becomes available in individual locations.



Complete Lifecycle Management

Cradlepoint 5G solutions help enterprises minimize complexity from installation to troubleshooting with tools and features such as the mobile installation application, the captive modem feature, 5G tools demonstrate 5G service value, and Out-of-Band Management.



Temperature:	<ul style="list-style-type: none"> Operating: -30 °C to 70 °C (-22 °F to 158 °F) Storage: -40 °C to 85 °C (-40 °F to 185 °F)
Humidity:	<ul style="list-style-type: none"> Operating: 10% to 90% Storage: 5% to 95%
Ingress Protection:	IP67 (dust tight and water emersion up to 1 meter)
Wind / Shock Rating:	134 MPH sustained wind rating
PHYSICAL	
Size:	210 x 163 x 56 mm (12.72 x 11.8 x 3.11 in)
Weight:	1.3 kg (2 lb 13.8 oz)
CERTIFICATIONS	
Safety:	<ul style="list-style-type: none"> UL/cUL CB Scheme EN 60950-22 EN 62368-1
Materials:	<ul style="list-style-type: none"> WEEE RoHS REACH California Prop 65
POWER	
Required:	PoE+ 802.3at PSE Type 2 (30 W)
Consumption:	<ul style="list-style-type: none"> Idle: 10 W Typical: 13 W Heavy: 16 W
PERFORMANCE	
IP Passthrough Mode Throughput:	TBD Gbps
Standard NAT Mode Throughput:	TBD Gbps
Captive Modem Mode Throughput:	TBD Gbps
LEDs	
Refer to the W1855 5GB Wideband Adapter Quick Start Guide .	

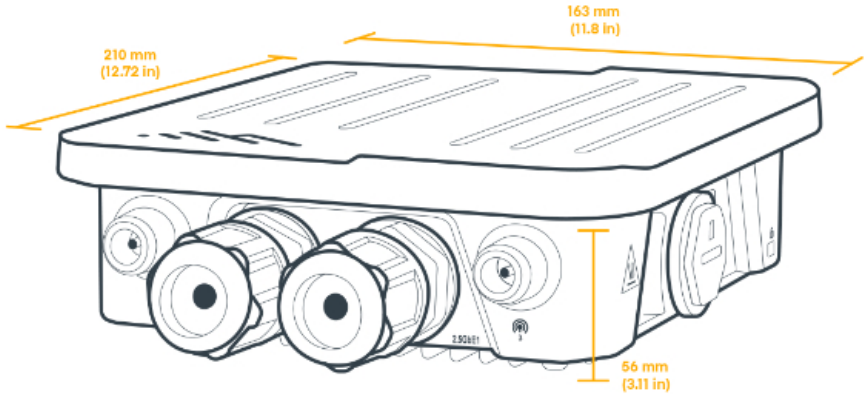
Performance testing was conducted based on requirements as defined in RFC2544 using fixed-frame 1518 byte packets. Throughput results reflect uni-directional UDP traffic with less than 1% packet loss as tested with wired connections. Results do not reflect performance of the cellular wireless operator networks.

Enterprise-Class Modem Specifications

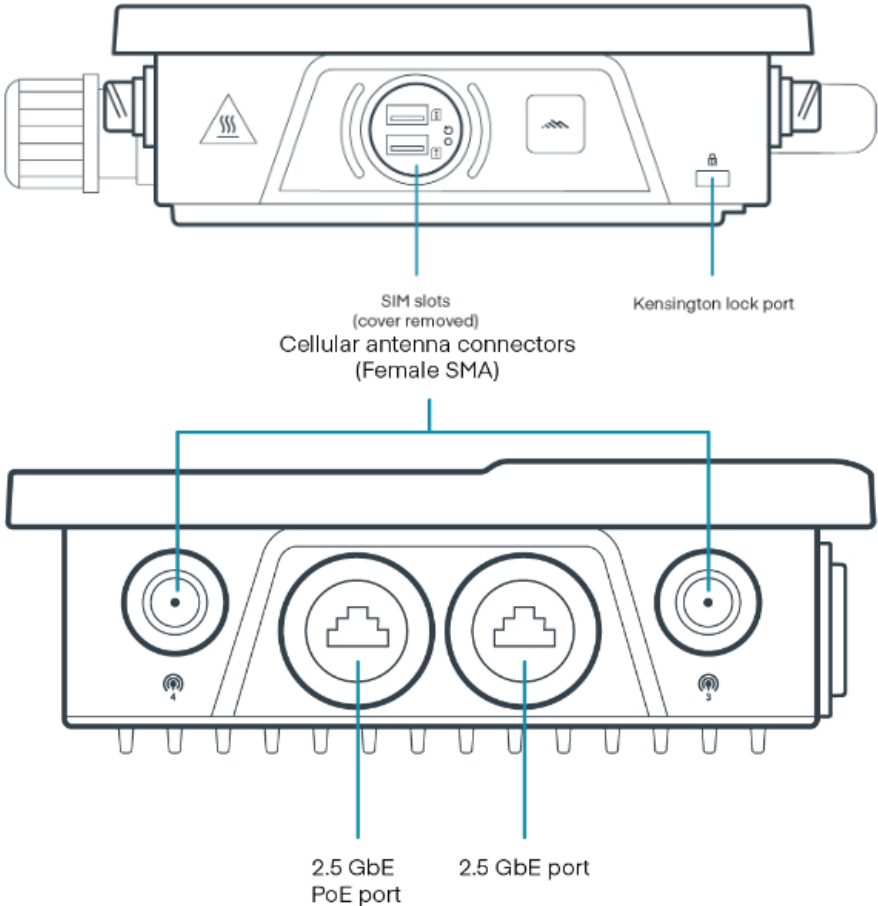
SPECIFICATION	
Technology:	5G NSA/SA 3GPP release 16 compliant, with LTE-ADV-PRO Cat 16 fallback — Dual SIM slots, 4FF form factor
3G:	WCDMA/HSPA+
Carrier Aggregation:	LTE only; up to 7CA downlink, 2CA uplink ENDC 5G + LTE; downlink and uplink supported. Refer to the Modem Carrier Aggregations article.
Peak Downlink Rates:	Up to 3.4 Gbps NSA and 2.4 Gbs SA — based on 19 Layers LTE + TDD (100 MHz BW, 256 QAM, 4x4)
Peak Uplink Rates:	Up to 550 Mbps NSA and 900 Mbps SA — based on 2 Layers LTE + TDD (100 MHz BW, 256 QAM, SISO)
MIMO:	4x4 MIMO
Modulation:	— Up to 256 - FR1
4G/LTE Bands:	LTE FDD — B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B66, B71 LTE TDD — B34, B38, B39, B40, B41, B42, B43, B46, B48
5G NR Bands:	5G NSA — n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48, n66, n70, n71, n75, n76, n77, n78, n79 5G SA
3G Bands:	B1, B2, B4, B5, B8, B19
Power:	— LTE only; 23 dBm ± 1 (typical conducted) — ENDC 5G + LTE; 20 dBm ± 1 (typical conducted)
Antennas:	N-type female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 4, included)
GNSS:	Passive GNSS — GPS, GLONASS, BeiDou, Galileo
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, T-Mobile, Verizon [†]
Public Safety Network Certifications:	TBD
Private LTE:	Yes, includes FCC Part 96 (CBRS Band 48)

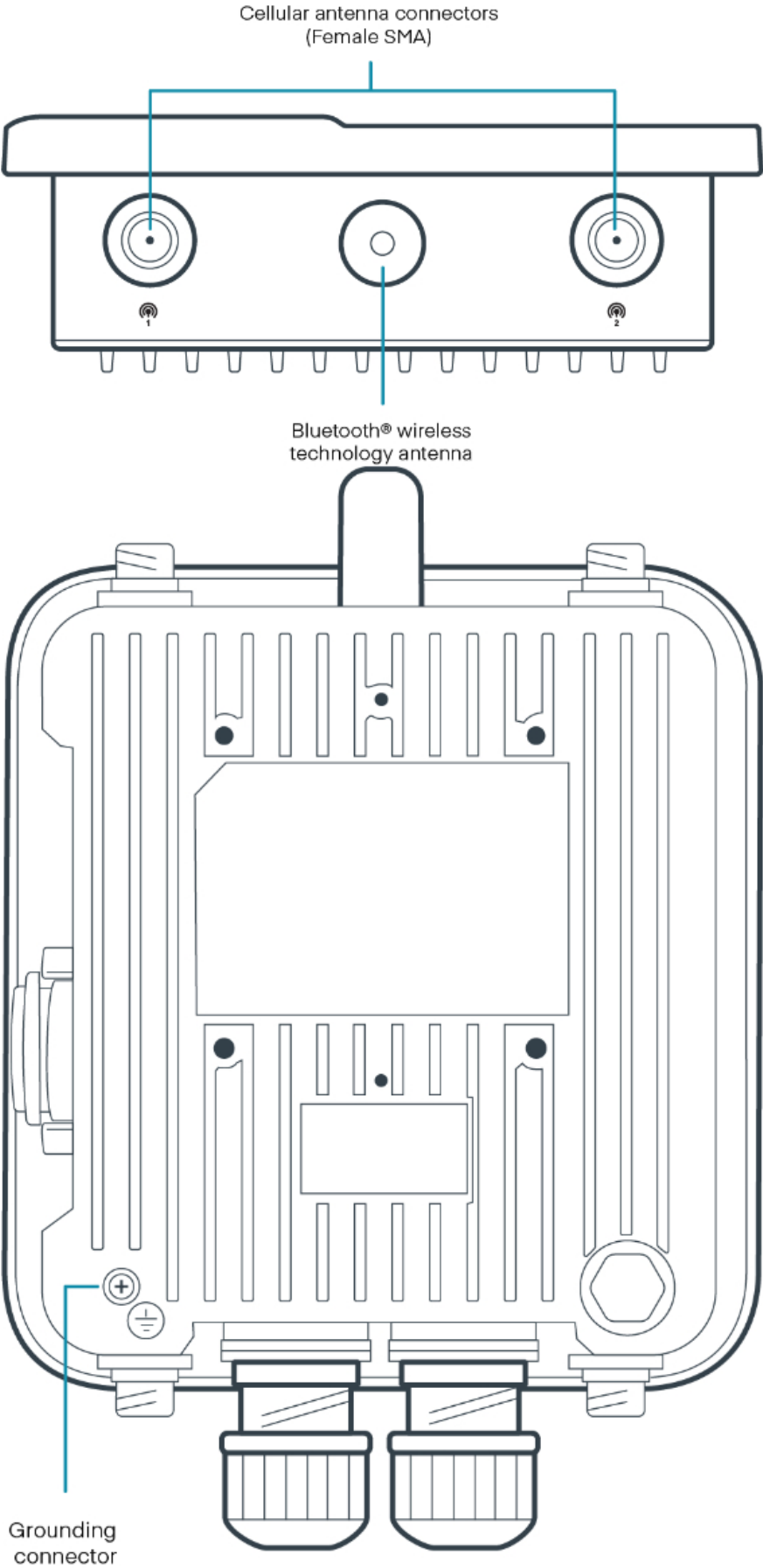
[†]Cellular carriers and operators throughout the world may only require telecom industry certifications, like PTCRB or GCF, to operate on their network. Some carriers require additional testing and approval, beyond telecom certifications, to operate on their network. A carrier listed in the approvals 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.

Physical Measurements & Features

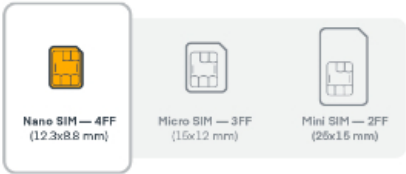


Features





SIM Card Info



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

NetCloud Enterprise Branch Packages for the W1855 Series 5G Wideband Adapter

REGION	PACKAGE PLAN	PART NUMBER
North America: U.S. & Canada	Essentials	BE0x-18555GB-GN
	Essentials + Advanced	BEAx-20055GB-GN
U.S. Federal Government	TAA Compliant NC — Essentials + Advanced	TAA-BEAy-18555GB-GN
Europe: European Union (EU)	Essentials	BE0x-18555GB-GE
	Essentials + Advanced	BEAx-20055GB-GE
Europe: United Kingdom (UK)	Essentials	BE0x-18555GB-GU
	Essentials + Advanced	BEAx-20055GB-GU
Asia Pacific: Asia-Pacific (AP), Australia & New Zealand (NZ)	Essentials	BE0x-18555GB-GP
	Essentials + Advanced	BEAx-20055GB-GP
All Regions	Renewal — Essentials + Advanced	BEAx-NCEA-R

x = 1, 3, or 5 years

y = 3 or 5 years

Accessories

INCLUDED	PART NUMBER
W1855 Series 5G Wideband Adapter	
802.3at 30 W PoE Injector	N/A

One of the following:	
— PoE Injector, 48 V, 30 W, 1.8 meters, C13 NA Type B line cord	170877-000
— PoE Injector, 48 V, 30 W, 1.8 meters, C13 EU Type F line cord	170877-001
— PoE Injector, 48 V, 30 W, 1.8 meters, C13 UK Type G line cord	170877-002
— PoE Injector, 48 V, 30 W, 1.8 meters, C13 NUA Type I line cord	170877-003
— PoE Injector, 48 V, 30 W, 1.8 meters, C13 ZA Type M line cord	170877-004
— PoE Injector, 48 V, 30 W, 1.8 meters, C13 NA Type B line cord, Taiwan	170877-005
Cellular antenna, outdoor 5G low/mid band with N type connector (Qty 4)	N/A
Wall/pole mounting bracket	N/A
Pole mounting clamp	N/A
Ethernet port plug (Qty 2)	N/A
Ethernet cable gland (Qty 2)	N/A
Small accessories kit	N/A
— Device to bracket screws (Qty 4)	
— Wall mount screws (Qty 4)	
— Wall anchors (Qty 4)	
Plate to W1855 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.

More Information

Find the most up-to-date information at cradlepoint.com/w1855