

# Huawei AT815SN Brochure-Detailed





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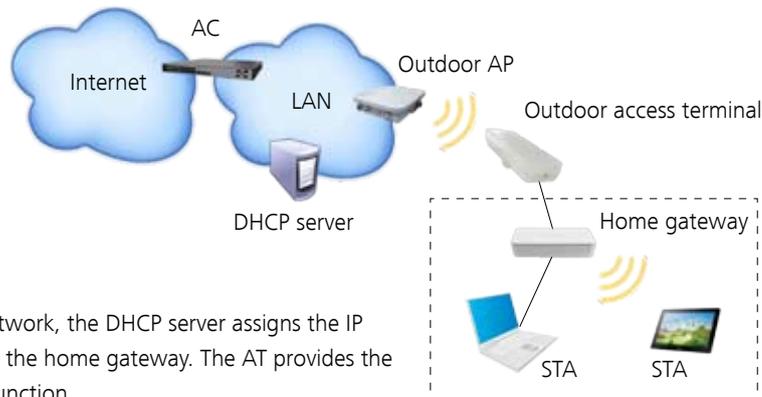
Huawei AT815SN is a standard outdoor access terminal (AT) that provides excellent remote access performance and enhanced protection. It supports 2x2 MIMO and the 5 GHz frequency band, complies with IEEE 802.11a/n, and can work as a wireless bridge. It provides comprehensive service support capabilities and features high reliability, high security, simple network deployment, and real-time remote management and maintenance, which meets outdoor long-distance access requirements.

## Product Features

- Supports 2x2 MIMO and provides a maximum rate of 300 Mbit/s.
- Supports Wi-Fi Multimedia (WMM) and priority mapping on the air interface and wired interface.
- Uses the latest 802.11n chip to provide higher performance and wider coverage.
- Supports CPE WAN Management Protocol (CWMP) and can be remotely managed in a centralized manner.
- Supports batch upgrade.
- Allows real-time monitoring on the network management system (NMS) to facilitate remote configuration and fast fault location.
- Provides strong hardware protection capability.
- Adapts to a wide temperature range from -20° C to +55° C.
- Uses industry-standard components and design methods, improving industry-level reliability.
- Provides IP55 protection level.
- Provides a built-in antenna and uses a built-in surge protection design.
- Supports isolation of Ethernet interfaces.

## Typical Networking

The following figure shows typical AT815SN networking.



On the network, the DHCP server assigns the IP address to the home gateway. The AT provides the bridging function.

## Basic Specifications

Item	Specifications	
Technical specifications	Dimensions (H x W x D)	49 mm x 295 mm x 132 mm
	Weight	0.8 kg
	System memory	128 MB DDR2 32 MB flash memory
Power specifications	Power input	PoE power: -48 V DC PoE function in compliance with IEEE 802.3af
	Maximum power consumption	9.5W
Environment specifications	Operating temperature	-20°C to +55°C
	Storage temperature	-40°C to +70°C
	Operating humidity	5% to 95% (non-condensing)
	Waterproof grade	IP55
	Altitude	-60 m to 5,000 m (If the altitude is lower than 1,800 meters, the AT operates within the normal temperature range. When the altitude is between 1,800 m and 5,000 m, the operating temperature reduces by 1°C every time the altitude increases by 220 m.)

## Radio Specifications

Item	Description		
Antenna type	Built-in antenna		
Antenna gain	13 dBi		
Maximum transmit power	5 GHz: 23 dBm		
Channel rate	802.11g: 6, 9, 12, 18, 24, 36, 48, and 54 Mbit/s 802.11n: 300 Mbit/s		
Receiver sensitivity	5 GHz 802.11a (non-HT20) <ul style="list-style-type: none"> <li>• -93 dBm @ 6 Mb/s</li> <li>• -92 dBm @ 9 Mb/s</li> <li>• -92 dBm @ 12 Mb/s</li> <li>• -88 dBm @ 18 Mb/s</li> <li>• -86 dBm @ 24 Mb/s</li> <li>• -81 dBm @ 36 Mb/s</li> <li>• -79 dBm @ 48 Mb/s</li> <li>• -77 dBm @ 54 Mb/s</li> </ul>	5 GHz 802.11n (HT20) <ul style="list-style-type: none"> <li>• -93 dBm @ MCS0</li> <li>• -91 dBm @ MCS1</li> <li>• -88 dBm @ MCS2</li> <li>• -85 dBm @ MCS3</li> <li>• -80 dBm @ MCS4</li> <li>• -78 dBm @ MCS5</li> <li>• -75 dBm @ MCS6</li> <li>• -73 dBm @ MCS7</li> <li>• -91 dBm @ MCS8</li> <li>• -89dBm @ MCS9</li> <li>• -86 dBm @ MCS10</li> <li>• -83 dBm @ MCS11</li> <li>• -78 dBm @ MCS12</li> <li>• -76 dBm @ MCS13</li> <li>• -73dBm @ MCS14</li> <li>• -71 dBm @ MCS15</li> </ul>	5 GHz 802.11n (HT40) <ul style="list-style-type: none"> <li>• -89 dBm @ MCS0</li> <li>• -87dBm @ MCS1</li> <li>• -85 dBm @ MCS2/</li> <li>• -82 dBm @ MCS3</li> <li>• -78 dBm @ MCS4</li> <li>• -74 dBm @ MCS5</li> <li>• -72 dBm @ MCS6</li> <li>• -70 dBm @ MCS7</li> <li>• -87 dBm @ MCS8</li> <li>• -86dBm @ MCS9</li> <li>• -83 dBm @ MCS10</li> <li>• -80 dBm @ MCS11</li> <li>• -76 dBm @ MCS12</li> <li>• -72 dBm @ MCS13</li> <li>• -70 dBm @ MCS14</li> <li>• -68 dBm @ MCS15</li> </ul>

## Product Features

WLAN features	<p>Compliance with IEEE 802.11a/b/g/n, providing a maximum rate of 300 Mbit/s</p> <p>Maximum ratio combining (MRC)</p> <p>Maximum-likelihood detection (MLD)</p> <p>Data unit aggregation, including A-MPDU (Tx/Rx)</p> <p>802.11 dynamic frequency selection (DFS)</p> <p>Priority mapping and packet scheduling based on a Wi-Fi Multimedia (WMM) profile to implement priority-based data processing and forwarding</p> <p>Automatic and manual rate adjustment (the rate is adjusted automatically by default)</p> <p>WLAN channel management and channel rate adjustment</p> <p>Signal sustain technology (SST)</p>
Network features	<p>Compliance with IEEE 802.3u</p> <p>Auto-negotiation of the rate and duplex mode and automatic switchover between the Media Dependent Interface (MDI) and Media Dependent Interface Crossover (MDI-X)</p> <p>VLAN trunk on uplink air interfaces</p> <p>DHCP client, obtaining IP addresses through DHCP</p>
QoS Features	<p>Priority mapping and packet scheduling based on a Wi-Fi Multimedia (WMM) profile to implement priority-based data processing and forwarding</p> <p>Priority mapping for upstream packets and flow-based mapping for downstream packets</p> <p>Queue mapping and scheduling</p>
Security features	WPA2-PSK authentication and encryption
Maintenance features	<p>CPE WAN Management Protocol (CWMP) and remote management in a centralized manner</p> <p>Batch upgrade</p> <p>Local AP management using Telnet</p> <p>Real-time configuration monitoring and fast fault location using the NMS</p> <p>System status alarm</p>

## Standards Compliance

Safety standards	<p>UL 60950, 2nd Edition</p> <p>CAN/CSA-C22.2 No. 60950, 2nd Edition</p> <p>IEC 60950, 2nd Edition</p>	<p>EN 60950, 2nd Edition</p> <p>GB 4943</p>
Radio standards	<p>ETSI EN 301 893</p> <p>FCC Part 15C: 15.247</p> <p>FCC Part 15E: 15.407</p>	<p>RSS-210</p> <p>RSS-102</p> <p>AS/NZS 4268</p>
EMC standards	<p>EN 301 489-17</p> <p>FCC Part 15</p> <p>ICES-003</p>	<p>YD/T 1312.2-2004</p> <p>EN 55022(Class B)</p> <p>AS/NZS CIPSR22</p>
IEEE standards	<p>IEEE 802.11a</p> <p>IEEE 802.11n</p> <p>IEEE 802.11h</p>	<p>IEEE 802.11d</p> <p>IEEE 802.11e</p>
Security standards	<p>802.11i, Wi-Fi Protected Access 2 (WPA2), and WPA</p> <p>Advanced Encryption Standards (AES)</p>	

Environmental standards	ETSI 300 019-2-1 ETSI 300 019-2-2 ETSI 300 019-2-3	
EMF	CENELEC EN 62311 CENELEC EN 50385 FCC Bulletin OET65	RSS-102 FCC Part1&2 FCC KDB
RoHS	Directive 2002/95/EC&2011/65/EU	
Reach	Regulation 1907/2006/EC	
WEEE	Directive 2002/96/EC & 2012/19/EU	

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- Design, deploy, and operate a high-performance network that is reliable and secure.
- Maximize return on investment and reduce operating expenses.

### More Information

For more information, please visit <http://e.huawei.com> or contact your local Huawei office.



Enterprise Services



Product Overview



Marketing Documentation



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HUAWEI TECHNOLOGIES CO.,LTD.  
Huawei Industrial Base  
Bantian Longgang  
Shenzhen 518129,P.R.China  
Tel: +86 755 28780808

[www.huawei.com](http://www.huawei.com)