

AT&T Cell Booster & AT&T Cell Booster Pro

Broadband Connectivity Configuration Requirements

AT&T Cell Booster & AT&T Cell Booster Pro require a customer-provided direct internet broadband connection for connectivity with the AT&T Network. The required bandwidth depends on the number of simultaneous users you want to support and whether data-intensive applications will be used. The minimum required bandwidth recommended:

	Broadband Minimum Downlink Bandwidth	Broadband Minimum Uplink bandwidth
Cell Booster	5M bps	1 Mbps
1 Cell Booster Pro	25 Mbps	5 Mbps
2 Cell Booster Pro Devices	30 Mbps	7 Mbps
3 Cell Booster Pro Devices	35 Mbps	9 Mbps
4 Cell Booster Pro Devices	40 Mbps	11 Mbps
5 Cell Booster Pro Devices	45 Mbps	13 Mbps
6 Cell Booster Pro Devices	50 Mbps	15 Mbps

Because of the wide variety of network configurations, router/switch manufacturers, Internet Service Providers, and corporate internet policies; AT&T cannot assist with making modifications to your firewall settings. AT&T recommends consultation with a network specialist, corporate IT organization, router manufacturer, and/or Internet Service Provider to answer specific network setup questions.

Local Broadband Settings

For users with custom local Network settings, confirm the following router/switch settings are set for your AT&T Cell Booster to establish connectivity with the Network:

1. DHCP is ON
Note: For installations where static assignment of an IP address is desired the use of MAC Binding and static DHCP Reservation is suggested. Static IP is not supported.
2. Public DNS is reachable
3. MTU size is set to 1500 or higher
4. MAC address filtering is either turned off or allows the MAC address of the AT&T Cell Booster
5. IPSec Pass-Through is Enabled
6. Block Fragmented Packets is Disabled

If using multiple routers, AT&T Cell Booster must be connected to the first router connected to the broadband modem. If AT&T Cell Booster is connected to a router that is connected to a modem, and both the router and the modem have NAT (Network Address Translation) enabled, disable NAT either in the router or in the modem.

Broadband Connectivity and Port Configuration

Installing AT&T Cell Booster behind a firewall or router with firewall capabilities requires the following port settings to allow communication with the AT&T Network. All ports listed need to be open for inbound and outbound connections:

- UDP / 500 IPSEC Port
- UDP / 4500 IPSEC Port
- ESP Protocol 50
- UDP / 123 NTP Port (timing sync)

Unimpeded inbound and outbound traffic on UDP ports 500 and 4500 and/or ESP Protocol 50 is required to establish a secure IPsec tunnel. AT&T Cell Booster uses NTP for timing synchronization and requires UDP port 123 to be open for this traffic.

If the local network has a firewall with specific IP addresses allowed to pass through, traffic to and from the following addresses must be allowed to pass:

Fully Qualified Domain Names & IP Addresses

AT&T uses multiple Fully Qualified Domain Names (FQDNs) across the country with dynamic IP addressing and FQDNs may resolve to multiple IP addresses. The following tables identify all IP addresses, FQDNs and associated ports used by the AT&T Cell Booster Network.

NTP IP Addresses:

IP Address	Port
216.239.35.8	UDP 123
216.239.35.12	UDP 123
129.134.25.123	UDP 123
17.253.4.125	UDP 123

IPSec IP Addresses

Note: Both IP addresses and IP address subnets are listed below. For IP address subnets notated as /26, the IP address range includes all IP addresses from **x.x.x.65 to x.x.x.126**.

IP Address	Port	Protocol
107.122.134.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
107.122.135.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
107.122.136.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.190.21.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.192.42.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.192.80.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.192.81.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.194.142.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.198.56.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.198.57.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.198.58.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
166.198.59.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP
108.144.26.64/26	UDP 500, 4500, 33434, 33435, 33436	UDP and/or ESP

IPSec FQDNs

Fully Qualified Domain Name
bootstrap-ipsecrouter1.ngfemto.wireless.att.com
initial-ipsecrouter.ngfemto.wireless.att.com
akr3-oam.ngfemto.wireless.att.com
akr3-4gb.ngfemto.wireless.att.com
all4-oam.ngfemto.wireless.att.com
all4-4gb.ngfemto.wireless.att.com
atn3-oam.ngfemto.wireless.att.com
atn3-4gb.ngfemto.wireless.att.com
atl3-oam.ngfemto.wireless.att.com
atl3-4gb.ngfemto.wireless.att.com
brp1-oam.ngfemto.wireless.att.com
brp1-4gb.ngfemto.wireless.att.com
chg3-oam.ngfemto.wireless.att.com
chg3-4gb.ngfemto.wireless.att.com
fro2-oam.ngfemto.wireless.att.com
fro2-4gb.ngfemto.wireless.att.com
hst5-oam.ngfemto.wireless.att.com
hst5-4gb.ngfemto.wireless.att.com
lsa4-oam.ngfemto.wireless.att.com
lsa4-4gb.ngfemto.wireless.att.com
scr1-oam.ngfemto.wireless.att.com
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