



Configuring Radio Antenna Settings

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The Catalyst IW9167E supports eight external antennas with eight N-type female connectors to support multiple antenna options. The antenna ports 1, 4, and 5 can support self-identifying antennas (SIA). Radio 1 connects to ports 1 to 4, and Radio 2 connects to ports 5 to 8. For more information on antennas, see [Antennas and Radios](#).

The Catalyst IW9165E supports four external antennas with Reverse-polarity SMA (RP-SMA) (f) connectors. Radio 1 connects to antenna ports 1 and 2, Radio 2 connects to antenna ports 3 and 4, and antenna ports 1 and 3 can support SIA antennas.

The Catalyst IW9165D has a built-in directional antenna and supports two external antennas with N-type (f) connectors. Radio 1 connects to the internal antenna. Radio 2 connects to antenna ports 1 and 3. Antenna port 3 can support SIA antenna.

The following sections describe the CLI commands to manage antenna port and gain on each antenna for different Radio mode:

Configuring Antenna Gain

To configure an antenna gain, use the following CLI command:

Set the maximum antenna gain value in integer or string UNSELECTED.

For UNSELECTED, the background process automatically configures the minimum supported antenna gain.



Note Once the SIA is connected, gain sets automatically without any input.

```
Device# configure dot11radio <interface> antenna gain <gain>
gain:
<1-19> antenna gain in dBi
WORD UNSELECTED
Device# write
```

Configuring Transmit and Receive Antennas

To configure a transmission chain, use the following CLI command:



Note Catalyst IW9165 does not support abcd-antenna mode.

```
Device# configure dot11radio <interface> antenna < A >
configure antenna chains (A) in use as follows
a-antenna - configure dot11 antenna a
ab-antenna - configure dot11 antenna ab
abcd-antenna - configure dot11 antenna abcd
Device# write
```

Configuring Transmission Power

To configure a transmission power, use the following CLI command:

Set the maximum transmission power level. For AUTO, the background process automatically configures the maximum allowed power level one.



Note Eight is the lowest power level and one is the highest power level.

```
Device# configure dot11radio <interface> txpower-level <level>
txpower level:
<1-8> tx power level value
WORD AUTO
Device# write
```