

8.5 FCC Certified Antennas

This device has been designed to operate with the antennas listed below, having a maximum peak gain of ~~20~~ dB. The Max. Tx Power Setting in the GUI listed below for each antenna will limit the EIRP at any time to 1W/1MHz (30 dBm). Antennas not included in this list or having a peak gain greater than ~~20~~ dB are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

Table 45: Spec. - FCC Certified Antennas: 5.4 GHz Operation				
Redline PN	Ant. Gain (dBi)	Antenna Description	App.	GUI Max. Tx Power Setting
A2408MTF	-24	Antenna: 2 foot, 8 degree, 24 dBi flat panel antenna.	PTP	5
A2014ARF	20	Antenna: 1 foot, 13.5 degree, 20 dBi flat panel antenna.	PTP	0
PA1760EAS	17	Sector Antenna: 60 degree, 17 dBi, vertical polarization.	PMP	2
PA1660EASH	16	Sector Antenna: 60 degree, 16 dBi, horizontal polarization.	PMP	3
PA1690EAS	16	Sector Antenna: 90 degree, 16 dBi, vertical polarization.	PMP	3
PA1590EASH	15	Sector Antenna: 90 degree, 15 dBi, horizontal polarization.	PMP	4
A1490MTS	14.5	Sector Antenna: 90 degree, 14.5 dBi, vertical polarization	PMP	4.5
PA14120EAS	14	Sector Antenna: 120 degree, 14 dBi, horizontal polarization.	PMP	5
PA14120EASH	14	Sector Antenna: 120 degree, 14 dBi, horizontal polarization.	PMP	5
A11360EAO	11	Sector Antenna: 360 degree, 11.0 dBi.	PMP	8

Note: The RF output power and selection must be professionally programmed and installed by the manufacturer or a trained professional installer.

Antenna Gain: 20 dBi: A2014ARF

Flat Panel Antenna: 1 foot, 13.5 degree, 20 dBi flat panel antenna (HD-MNT-KIT required).

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	20.00	7.00	3.0	8.67	28.67	30.00	1.33

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	20.00	3.50	1.0	7.83	27.83	30.00	2.17

Antenna Gain: 17 dBi: PA1760EAS

Premium Sector Antenna: 60 degree, High performance, vertical polarization, offers improved cross polarization and F/B performance. (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	17.00	7.00	6.0	10.83	27.83	30.00	2.17

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	17.00	3.50	3.0	10.67	27.67	30.00	2.33

Antenna Gain: 16 dBi: PA1660EASH

Premium Sector Antenna: 60 degree, High performance, horizontal polarization, offers improved cross polarization and F/B performance. (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	16.00	7.00	8.0	12.67	28.67	30.00	1.33

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	16.00	3.50	5.0	12.00	28	30.00	2.00

Antenna Gain: 16 dBi: PA1690EAS

Premium Sector Antenna: 90 degree, High performance, vertical polarization, offers improved cross polarization and F/B performance. (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	16.00	7.00	8.0	12.67	28.67	30.00	1.33

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	16.00	3.50	5.0	12.00	28	30.00	2.00

Antenna Gain: 15 dBi: PA1590EASH

Premium Sector Antenna: 90 degree, High performance, horizontal polarization, offers improved cross polarization and F/B performance. (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	15.00	7.00	8.0	12.67	27.67	30.00	2.33

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	15.00	3.50	6.0	13.00	28	30.00	2.00

Antenna Gain: 14.5 dBi: A1490MTS

Sector Antenna: 90 degree, High performance, vertical polarization, offers improved cross polarization and F/B performance. (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	14.50	7.00	9.0	13.83	28.33	30.00	1.67

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	14.50	3.50	6.0	13.00	27.5	30.00	2.50

Antenna Gain: 14 dBi: PA14120EAS

Sector Antenna: 120 degree, High performance, vertical polarization, offers improved cross polarization and F/B performance. (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	14.00	7.00	9.0	13.87	27.87	30.00	2.13

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	14.00	3.50	7.0	14.33	28.33	30.00	1.67

Antenna Gain: 14 dBi: PA14120EASH

Sector Antenna: 120 degree, High performance, horizontal polarization, offers improved cross polarization and F/B performance. (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	14.00	7.00	9.0	13.87	27.87	30.00	2.13

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	14.00	3.50	7.0	14.33	28.33	30.00	1.67

Antenna Gain: 11dBi: A11360EAO

Omni Antenna: 360 degree (requires HD-MNT, sold separately)

Channel Spacing: 7 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	11.00	7.00	12.0	16.67	27.67	30.00	2.33

Channel Spacing: 3.5 MHz

Freq. (GHz)	G _{ANT} (dBi)	B (MHz)	GUI Setting (dBm)	PPSD (Cond.) (dBm/MHz)	PPSD EIRP (dBm/MHz)	PPSD EIRP Limit (dBm/MHz)	Margin (dB)
3.6500	11.00	3.50	10.0	17.00	28	30.00	2.00