

Industry Canada User Manual Statements

The nominal passband gain is 25 dB and the nominal bandwidth is 150 MHz to 2.94 GHz.

The rated mean output power is 20 dBm and the input and output impedances are 50 ohms

The Manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output signal is re-radiated and can cause interference to adjacent band users. This power reduction is to be by means of input power or gain reduction and not by an attenuator at the output of the device."

FCC compliance and interference statements

Hub. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1) This device must accept any interference and
- 2) This device must accept any interference received including interference that may cause undesired operation

Changes or modifications not expressly approved by Zinwave Ltd. could void the user's authority to operate the equipment.

Remote Unit. This device complies with Part 22, Part 24, Part 27, Part 74 and Part 90 of the FCC rules. Changes or modifications not expressly approved by Zinwave Ltd. could void the user's authority to operate the equipment. For a list of services, please contact Zinwave.

- This device must only be used with antennas having a maximum gain of 8 dBi
- When operating on channel or channels under 47CFR part 90 as identified in the table below, this is a **Class B** booster as defined in 47CFR90.219.
 - Class B boosters must be registered with the FCC prior to operation, which can be done at the FCC Part 90 Class B Signal Booster Registration & Discovery website:
<https://signalboosters.fcc.gov/signal-boosters/>

Part 90 Signal Boosters THIS IS A 90.219 CLASS B DEVICE	
<p>WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. You MUST register Class B signal boosters (as defined in 47 CFR 90.219) online at www.fcc.gov/signal-boosters/registration. Unauthorized use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation.</p> <p>See User Manual for more information</p>	

- When operating on channel or channels under 47CFR parts 22, 24, 27 or 74 as identified in the table below, this is an Industrial Booster as per 47CFR part 20.

<p>WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. Un authorised use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation</p>

Remote units with FCC ID:UPO302-1107 only support services in the following bands of operation:

Rule Part	Band	Downlink Frequency Range (MHz)	Service	Modulation
90	VHF Public Safety	150.8 – 156.2475 157.1875 – 161.575 161.775 – 161.9625 162.0125 – 173.4	P25	C4FM (QPSK)
			FM	FM ±2.5kHz dev'n
	UHF Public Safety	406.1 - 420 421 - 430	P25	C4FM (QPSK)
			FM	FM ±2.5kHz dev'n
		456.0 – 462.5375 462.7375 - 467.5375 467.7375 - 512.0	FM	FM ±5.0kHz dev'n
			P25	C4FM (QPSK)
		FM	FM ±2.5kHz dev'n	
		FM	FM ±5.0kHz dev'n	
74	UHF PMSE	470 – 608 614 – 679.9	FM	FM ±75kHz dev'n
90	700MHz Public Safety	769 – 775	P25	C4FM (QPSK)
			OpenSky	4-level GFSK
27	700MHz LTE	698 - 758	LTE	64 QAM
90	800MHz Public Safety	851 – 854, 854- 861 862 - 869	P25	C4FM (QPSK)
			OpenSky	4-level GFSK
	800MHz SMR	851 – 854, 854- 861 862 - 869	FM & EDACS	FM ±5.0kHz dev'n
	800MHz ESMR	854 – 861 862 - 869	iDEN	16-QAM
	900MHz ESMR	935 - 940	iDEN	16-QAM
	800MHz ESMR	854 – 861 862 - 869	EVDO (QPSK+QAM)	QPSK + QAM
			FD-LTE	QPSK + QAM
22	Cellular	869 - 894	GSM	GMSK
			EDGE	8-PSK
			UMTS	QPSK
			HSPA/HSPA+	16-QAM/64-QAM
			CDMA	QPSK
			CDMA2000 Ev-DO	8PSK, 16-QAM
	929 Paging	929 - 930	FSK	FSK
931 Paging	931 - 932	FSK	FSK	
24	PCS	1930 - 1995	GSM	GMSK
			EDGE	8-PSK
			UMTS	QPSK
			HSPA/HSPA+	16-QAM/64-QAM
			FDD LTE (band 2/25)	QPSK + QAM
			CDMA	QPSK
			CDMA2000 Ev-DO	8PSK, 16-QAM
27	AWS	2110 - 2180	UMTS	QPSK
			HSPA/HSPA+	16-QAM/64-QAM
			FD-LTE (band 4)	16-QAM/64-QAM
			FD-LTE (band 10)	16-QAM/64-QAM
	AWS-4	2180 – 2200	FD-LTE	16-QAM/64-QAM
	WCS	2345 - 2360	FD-LTE	16-QAM/64-QAM
	BRS/EBS	2496 – 2690	LTE	16-QAM/64-QAM