



AETR05V/U

RADIO WITHOUT DISPLAY AND KEYBOARD (DMR)

Brand: Radiocom

Model Number: AETR05V/U

SPECIFICATIONS

General	Parameters	Specification
1.1	Frequency Range	VHF/UHF
1.2	TDMA	2 - Slot
1.3	Channel Capacity	16 Channels (Set without display)
1.4	Channel Spacing	12.5 KHz
1.5	Battery Capacity	Li-ion rechargeable battery of 2500 mAh capacity. Complying applicable BIS Standard
1.6	Average battery duty cycle 5/5/90	Digital mode: ≥10 hrs Analog mode: ≥8 hrs or more
1.7	Frequency Stability	±1.5 PPM or better
1.8	Impedance	50 Ω
1.9	Antenna	Helical Antenna
1.10	Weight	Less than 500 gms with battery
1.11	EMI/EMC	ETSIEN 301 489-1 & ETSI 301 489-5
1.12	Air Interface Standards	shall be open standards DMR Tier-II
1.13	SFR	Yes
1.14	Bluetooth	Yes
1.15	Recorder	Yes

TRANSMITTER	Parameters	Specification
2.1	RF Power Output	VHF -1 to 5 Watts (programmable) UHF -1 to 4 watts (programmable)
2.2	FM Emission	11K0F3E, 7K60FXE, 7K60FXD, 7K60FXW
2.3	Digital Modulation	4 FSK
2.4	Modulation Limiting	± 2.5 KHz @ 12.5 KHz
2.5	FM Hum & Noise	-40dB or better
2.6	Adjacent channel power	-60dBc or better
2.7	Audio Response	+1, -3 dB
2.8	Audio Distortion	Less than 3%
2.9	Digital Vocoder	AMBE +2
2.10	Communication Security (Optional)	System should have in built encryption and should also have provision to support 3rd party Encryption.
RECEIVERS	Parameters	Specification
3.1	Sensitivity (Analog)	0.30 µV (12 dB SINAD) or better
3.2	Sensitivity (Digital)	0.30 µV at 5% BER or better
3.3	Adjacent Channel Selectivity	60 dB or better
3.4	Inter-modulation	70 dB or better
3.5	Audio Output	Minimum 500 mW
3.6	Audio Distortion	Less than 3%

Environmental	parameters	Specification
4.1	Operating Temperature	-30°C to +55°C
4.2	Storage Temperature	-40°C to +70°C
4.3	Humidity	95% Max. at 40°C Non-condensing
4.4	Vibration	MIL-STD-810 F/G
4.5	Shock & Drop	MIL-STD-810 F/G
4.6	Water Intrusion/Dust	MIL-STD-810 F/G or IP-67
4.7	Salt	MIL-STD-810 F/G
4.8	Rain	MIL-STD-810 F/G
4.9	Low Pressure	MIL-STD-810 F/G

ACCESSORIES	Parameters	Specification
5.1.	Input Voltage	230V ±10%, 50Hz
5.2	Output Voltage	As per battery pack (Information will be provided by OEM / Vendor)
5.3	Type of Battery Charger	Li-ion
5.4	Protection	(1) Reverse polarity protection (2) Short circuit protection
5.5	Indication	Visual indication for all modes of charging status
5.6	Charging Time	Rapid charger: 1 to 3 hrs / Standard charger - 6 to 14 hrs
5.7	No. of Charging Pocket	1/2/6 (Vendors to quote accordingly)
5.8	Hand free Kit (VOX unit with PTT) (optional)	The offered set should be compatible with any one or more of the following variants: 1. Ear plug 2. Headphone 3. Bone conduction
5.9	Programming Kit	All necessary Software and Hardware required for programming of the set independently for lifelong support with regular updates.
5.10	Literature	(i) User manual with each radio sets should be provided free of cost in soft as well as hard copy. (ii) Technical repairing & maintenance manual, with complete block diagram, circuit layout, PCB layout, component & wiring diagram etc should be provided as per user's requirement in soft as well as hard copy.
5.11	No. of Battery	Two Li-ion batteries with each radio set.
5.12	Case	One good quality case with belt clip & shoulder strap to house the Radio Sets in operation.

FULLY COMPLIANT WITH MHA SPECIFICATIONS

- Fully compliant with Ministry of Home Affairs (MHA) specifications:
- Letter No. H-18026/1(TS&TD)/2016-CDN, Govt. of India, Directorate of Coordination, Police Wireless, dated 17th January 2018.

MAKE IN INDIA

- Classified under Make in India - Class 1 Category
- Manufacturing from Component level.
- SMT Operations will be in India.
- All components sourced from countries in compliance with Ministry of Finance Office Memorandum No. F.18/37/2020-PPD, dated 8th February 2021.

NOTE - Whenever there is a difference in parameters between Home Ministry Specs and Tender Specs, the Home Ministry Specs will prevail.

