**General**

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| --- | --- | --- |
| **Frequency coverage (Unit: MHz)** | **Receiver**  | 0.030–199.999\*400.000–470.000\* |
| **Transmitter** | 1.810–1.9993.500–3.8007.000–7.20010.100–10.15014.000–14.35018.068–18.16821.000–21.45024.890–24.99028.000–29.70050.000–52.000144.000–146.000430.000–440.000 |
| **Mode** | USB, LSB, CW, RTTY, AM, DV, FM, WFM (Rx only) |
| **No. of memory channels** | Memory channels: 500 channels (100 groups)Scan edges: 25 channelsCall channels: 4 channels (2 channels x 2 bands)   |
| **Antenna connector** | BNC connector (50Ω) (One connector for all bands) |
| **Power supply requirement** | 13.8 V DC ±15% (with external power supply)7.4 V DC (with BP-272) |
| **Operating temp. range** | –10°C to +60°C; +14°F to +140°F |
| **Frequency stability** | Less than ± 0.5 ppm(–10°C to +60°C; 14°F to 140°F) |
| **Frequency resolution** | 1 Hz |
| **Current drain** |  | **13.8 V DC** | **7.4 V DC** |
| **TX (Max. power)** | Less than 3 A (10 W) | Less than 2.5 A (5 W) |
| **RX (Max. audio)** | 0.5 A (typical) | 0.8 A (typical) |
| **RX (Standby)** | 0.3 A (typical) | 0.5 A (typical) |
| **Dimensions** | 200×83.5×82 mm (W×H×D, projections not included) |
| **Weight** | 1.1 kg (approximate; including BP-272) |

\* Some frequency bands are not guaranteed.

**Transmitter**

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| **Output power** |  | **13.8 V DC** | **7.4 V DC** |
| **SSB/CW/RTTY/FM/DV** | 0.1 to 10 W | 0.1 to 5 W |
| **AM** | 0.025 to 2.5 W | 0.025 to 1.25 W |
| **Modulation system** | SSB : Digital PSN modulationAM : Digital low power modulationFM : Digital reactance modulationDV : Digital GMSK modulation |
| **Spurious emissions** | Less than −50 dB (HF)Less than −60 dB (50 MHz)Less than −60 dB (144/430 MHz) |
| **Carrier suppression** | More than 50 dB |
| **Unwanted sideband** | More than 50 dB |

**Receiver**

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| --- | --- | --- |
| **Receiver system** | **0.030 to 24.999 MHz** | RF Direct Sampling          |
| **25.000 MHz and above** | Down Conversion IF Sampling |
| **Intermediate frequencies** | 25.000 and above：38.85 MHz±0.5 MHz |
| **Sensitivity(HF: Preamp-1 ON,50 MHz: Preamp-2 ON,144/430 MHz: Preamp ON)** |  | **0.500 to 1.799 MHz** | **1.800 to 29.999 MHz** | **50 MHz** | **144/430 MHz** |
| **SSB/CW（10 dB S/N)** | － | 0.20 μV | 0.15 μV | 0.11 μV |
| **AM（10dB S/N）13.0 μV** | 13.0 μV | 2.0 μV | 1.0 μV | 1.0 μV |
| **FM（12 dB SINAD）** | 0.5 μV (28.000 to 29.700 MHz) | 0.25 μV | 0.18 μV |
| **DV（1% BER）（PN9）** | 1.0 μV (28.000 to 29.700 MHz) | 0.63 μV | 0.35 μV |
| **Sensitivity for RED version(HF: Preamp-1 ON,50 MHz: Preamp-2 ON,144/430 MHz: Preamp ON)** |  | **1.8–2.999 MHz** | **3.0–29.995 MHz** | **50 MHz** | **144/430 MHz** |
| **SSB (BW=2.4 kHz)** | 10 dBμV emf | 0 dBμV emf | –6 dBμV emf | –6 dBμV emf |
| **AM (4 kHz, 60% modulation)** | 16 dBμV emf | 6 dBμV emf | 0 dBμV emf | 0 dBμV emf |
| **FM (7 kHz, 60% modulation)** | 0 dBμV emf (28.000 to 29.700 MHz) | –6 dBμV emf | –6 dBμV emf |
| **Selectivity (Filter: SHARP)** | **SSB（BW=2.4 kHz）** | More than 2.4 kHz/－6 dBLess than 3.4 kHz/－40 dB |
| **CW（BW=500 Hz）** | More than 500 Hz/－6 dBLess than 700 Hz/－40 dB |
| **RTTY（BW=500 Hz）** | More than 500 Hz/－6 dBLess than 800 Hz/－40 dB |
| **AM（BW=6 kHz）** | More than 6.0 kHz/－6 dBLess than 10 kHz/－40 dB |
| **FM（BW=15 kHz）** | More than 12.0 kHz/－6 dBLess than 22 kHz/－40 dB |
| **DV（12.5 kHz spacing）** | Less than －50 dB |
| **Spurious and image rejection ratio****(SSB/CW/AM/FM)** | HF: More than 70 dB\*(except for ADC aliasing)50 MHz: More than 70 dB\*144 MHz: More than 65 dB430 MHz: More than 54 dB\* At Intermediate frequency in 25–30 MHz or 50–54 MHz: More than 50 dB |
| **Audio output power** | **Internal SP** | More than 530 mW (12 Ω load at 10% distortion) |
| **External SP** | More than 200 mW (8 Ω load at 10% distortion) |