

KAPLAN

APCO RADIO FAMILY

General Properties

- Analog and digital Modes
- Compatible with APCO25 standard
- User Informative Alerts
- LCD Display
- Alphanumeric Keypad
- Graphical User Interface
- Call Logging
- Caller ID
- 3-Level RF Output Power
- Channel Scan
- VOX (Only With Audio Accessories)
- Transmit Time-out Timer
- Configurable Menu Options
- Computer Based Maintenance
- Compatible with MIL STD 810 C/D/E/F/G standards
- Compatible with EIA/TIA-102.CAAB-D, EIA/TIA-603-D
- Backward compatibility in analog mode

Digital Mode Properties

- Group call
- Individual call
- Emergency Call
- SMS (Short Message Service from Radio to Radio)
- Data Transmission (With Data Software Set)
- Status Messages
- Encryption (Optional)
- Index Book
- Call Alert

Aselsan Wide Area Coverage Applications

- Over-the-air frequency update
- Query from GPS location by an authorized radio



Portable Radio



Desktop Radio



Mobile Radio

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General Technical Specifications

| | |
|--|--|
| Modulation | Analog FM, C4FM |
| Channel Spacing | 12,5 / 25 kHz (Analog) 12,5 kHz (Digital) |
| Vocoder | 4,4 kb/s IMBE |
| Encryption Algorithms | DES-OFB, AES, Customized Encryption |
| Channel Capacity | 999 |
| Operating Voltage | Portable : 7.5 Vdc \pm 10% Mobile : 13.6 Vdc \pm 10% Desktop : 13.6 Vdc \pm 10 % |
| Display | 64x128 pixel LCD |
| Keypad | Portable :18 keys with backlight Mobile and Desktop: 20 keys with backlight |
| Dimensions of Portable Radio (without battery) (HxWxL) | 132x60x18.6mm (projections not included) |
| Weight of Portable Radio (without antenna and battery) | 220 g |
| Dimensions of Mobile Radio (HxWxD) | 46x165x165mm (projections not included) |
| Weight of Mobile Radio | 1,50kg |
| Desktop Radio Dimensions | 67x297x227 mm (HxWxD) |
| Desktop Radio's Power Supply Dimensions (HxWxD) | Type1 : 67x297x227 mm Type2: 60x126x310 mm |
| Weight of Desktop Radio | 3,5 kg |
| Operating Temperature Range | -30°C / +60°C |
| Storage Temperature Range | -40°C / +85°C |
| Humidity | 90% @ 50°C |

Portable Radio Batteries

| Battery Type | Dimensions (HxWxL) | Weight | Capacity | Duty Cycle* (5-5-90) @5W |
|----------------------|--------------------|--------|----------|----------------------------------|
| High Capacity Ni-MH | 110x51x18 mm | 205 g | 1900 mAh | \geq 15 h (With power saving)* |
| High Capacity Li-Ion | 110x51x24 mm | 150 g | 2300 mAh | \geq 18 h (With power saving)* |

* Values are evaluated for the digital mode at 5.0 W RF output power, in accordance with TIA 603-D under nominal conditions.

Receiver Technical Specifications

| | VHF | UHF |
|---------------------------|---|--|
| Frequency Range | 136-174 MHz | 380-470 MHz |
| Rated Audio Output Power | Portable: 1 W / 8 Ω Mobile : 7.5 W / 8 Ω Desktop : 7 W / 8 Ω | Portable : 1 W / 8 Ω Mobile : 7.5 W / 8 Ω Desktop : 7 W / 8 Ω |
| Sensitivity | Portable : \leq -119 dBm Mobile : \leq -120 dBm Desktop : \leq -120 dBm | Portable : \leq -118 dBm Mobile : \leq -119 dBm Desktop : \leq -119 dBm |
| Intermodulation Rejection | Portable: \geq 73dB Mobile: \geq 75dB Desktop: \geq 80dB | Portable: \geq 73dB Mobile: \geq 75dB Desktop: \geq 80dB |
| RX Spurious Signal | Portable: \geq 70 dB Mobile: \geq 80 dB Desktop: \geq 90 dB | Portable: \geq 70 dB Mobile: \geq 80 dB Desktop: \geq 90 dB |
| Receiver Noise Ratio | 25 kHz channel: \geq 40 dB 12,5 kHz channel: \geq 34 dB | 25 kHz channel: \geq 40 dB 12,5 kHz channel: \geq 34 dB |
| Audio Distortion | \leq %3 | \leq %3 |

Transmitter Technical Specifications

| | | |
|---|--|--|
| Rated RF Output Power | Portable: 1-5 W Mobile: 10-40 W Desktop: 10-90 W | Portable: 1-5 W Mobile: 10-30 W Desktop: 10-70 W |
| Frequency Stability (-30°C / +60°C; 25°C ref) | \pm 2,5 ppm | \pm 1,5 ppm |
| Modulation Limiting | 25 kHz channel \pm 5,0 kHz 12,5 kHz channel \pm 2,5 kHz | 25 kHz channel \pm 5,0 kHz 12,5 kHz channel \pm 2,5 kHz |
| Conducted Spurious Emissions | \leq -20 dBm | \leq -20 dBm |

Specifications are subject to change without any notice. | All tolerances are within \pm 10%.