

ASTELA | DRON 4942R

TETHERED DRONE BASED
MOBILE RELAY SYSTEM

#PublicSafetyCommunication



aselsan

ASTE LA | DRON 4942R

TETHERED DRONE BASED MOBILE RELAY SYSTEM

Drone System

- 8+ hours endurance
- 50/150 meters agl operational height
- Purpose designed air vehicle common for both configurations
- Automatic takeoff/navigation/precision landing
- Redundant link (via tether and Rf)
- Emergency battery and in-flight charging
- Collision avoidance strobe light
- -20°C +40°C operation
- Portable components
- One/double generator input based on environmental conditions
- Redundant power sources (grid/generator) and automatic switching
- Injection man-portable generators with parallel operation capability
- Special user interface
- Stationary/moving usage infrastructure
- ADS-B (optional)
- CRPA GNSS antenna (optional)
- GNSS independent relative positioning system (optional)
- Provision for RC command (optional)
- Provision for fiber-optic link via tether (optional)
- EO/IR payload (optional)

ASTE LA DRON4942R Drone Relay

- Compact design
- APCO25 or DMR or Analog
- Compatible with ETSI and TIA Standards
- Continuous dutycycle
- Ethernet/IP interface (wide area system ip connection)

Technical Specifications

Air Vehicle

- Mission weight : ~11.5 kg
- Structure : Sandwich carbon fiber
- Thrust configuration : X4- 4 motors-4 rotors-2 blades
- Rotors : 28" carbon fiber, foldable
- GNSS system : Multi constellation, RTK capable
- Constellations : GPS, GLONASS, GALILEO, BEIDOU
- Link system : Redundant (tether + RF)
- Emergency battery : Onboard, in-flight chargeable
- Navigation aids : Laser altimeter, RTK, GTSDS
- Flight modes : Automatic take-off, nav, landing
- Collision avoidance : Strobe light, ADS-B (optional)
- Jamming resistance : Takeoff, nav, landing under GNSS jamming

Ground Station

- Flight height : 50/150 Meters
- Smart winch : Automatic tension controlled, 3 modes
- Smart winch modes : Manual/reactive (tension)/active (comm with AC)
- Power input : Double redundant, auto switching, 230VAC
- Output power : 3800W
- Output voltage : 420+ VDC
- Cable weight : 11/19 gr/m

Generators

- Weight per generator : 26.5 kg
- Max power output : 3200W
- Parallel operation : Yes
- Injection system : Yes
- Total power available : 6400W instant-5400w continuous @SL

Lightweight Drone Relay

- Output power : 5W
- Frequency band : 136-174 MHz
- Weight (duplexer included): ~1700 g
- Dimensions (Y x D x G) : 15x35x30 cm
- Power consumption : 40 W

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