

Remote Observation Post Lightweight

Tactical Support Equipment Inc.'s new Remote Observation Post is a redesigned and enhanced lightweight system that ensures ultimate mobility and rapid system setup.

The pan/tilt/zoom camera comes with a 26x optical zoom lens and an internal stabilization mechanism. The internal vibration dampening system ensures jitter-free and crisp video feeds. The camera and lens are housed in an anodized and waterproof aluminum case.

Users can operate the system manually via direct cable to 6.4-inch monitor/controller or remotely via the 224-400 MHz Digital Command and Control Radio with 4 watt output power and a 30-mile line-of-sight range.

The benefit of using TSE Inc.'s Remote OP Light is its light weight and small form-factor, which allows surveillance operators to deploy and operate the system quickly in either fixed or mobile applications.

Other benefits include:

A slow scan feature and NIR imaging mode that allows technical surveillance operators to use the system in near ambient light situations.

Integration with existing legacy CCTV systems and with most third-party encoders, DVRs, video servers and other surveillance monitors or recorders.



Part #: TSE-OP-D-LW

Features

- Auto-Focus
- Image Stabilization
- Manual or Remote Setup
- Color/NIR/Fixed FOV 26X Optical / 12X Digital Zoom (312X with Optical Zoom)
- Pressurized Nitrogen Backfilled to Avoid Fogging
- Lightweight & Small Form-Factor
- Low Power Usage



GSA Contract # GS-03F-0035S



Tactical Support Equipment

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Specifications

Camera & Lens Specifications

- **Pan Angle Range:** 540°
- **Tilt Angle Range** 190°
- **Pan Speed** 0.5° to 180°/S
- **Tilt Speed** 0.3° to 45°/S
- **Pan/Tilt Encoder Res.** 0.5°
- **Weight** 4.6 lbs (2.2kg)
- **Housing Material** Anodized Aluminum (Available in Black or Tan)
- **Power** 12 to 30 vdc, 500ma, 2A peak
- **Vibration** 3 grms 3 axis, Random 5 to 1000 MHz
- **Temperature** -20° to +70° C (-4° to +158°F)
- **Mounting** 3/8" tripod mounting screw
- **Optical Zoom** 26 X
- **Digital Zoom** 12 X (312 X with Optical Zoom)
- **Imaging Modes** Color / Near Infrared
- **TV Lines** NTSC 470 / PAL 460
- **PEL Count** NTSC 680,000 / PAL 800,000
- **Dynamic Range** 49 dB
- **Light Sensitivity** .05 Lux NIR Mod
- **Low Light-Long Integration** Yes / .25 sec.
- **Tripod:** Carbon Fiber

Command & Control Radio Specifications:

Transmitter

- **Frequency Range** 225-400 MHz (FHSS) or Single Frequency at One Time
- **Output Power** 4 Watt
- **Range, Line-of-Sight** 30 Miles
- **Modulations** 2 and 4 Level GFSK
- **Occupied Bandwidth** 21 kHz
- **Hopping Patterns** 15 per Band, 105 Total, User Selectable
- **Hopping Channels** 28,000 Possible, Maximum 64 or Single Frequency at One Time
- **Channel Spacing** 25 kHz
- **Hopping Bands** 7, User Selectable

Receiver

- **Sensitivity** -108 dBm for BER 1X10⁻⁶ 2 Level GFSK, -100 dBm for BER 1X10⁻⁶ 4 Level GFSK
- **Selectivity** 20 dB at fc plus/minus 27 kHz (2nd IF)
- **System Gain** 144 dB

Transmit and Receive Specifications

900 MHz 2 to 8 Watt Transmitter:

- RF:**
- **Frequency Range** 886 - 923 MHz
 - **RF Power Output** 2, 4, 8 Watts selectable, 9 - 17 VDC
 - **Transmit Duty Cycle** Continuous duty cycle with natural convection cooling
- Electrical:**
- **VSWR Mismatch** Circulator protected. No damage with mismatch.
- Interfaces:**
- **Video Input** BNC Female, 75 ohm
 - **RF Output** BNC Female, 50 ohm
 - **DC Input** Tajimi TR05 RB 2F, 2-pin flange mount
- Power:**
- **Operating Voltage** 9-19 VDC
 - **Current Consumption** Transmit: 2.3A @ 13.6 VDC, 2.1A typical @ 8W
- Mechanical:**
- **Dimensions** 1.55"H x 5.4"W x 4.85"D
 - **Weight** 1 Lb. 12 Oz
 - **Material** Aluminum-engineered enclosure
 - **Color** Black
- Environmental:**
- **Operating Temperature** -20 C to +60 C
 - **Storage Temperature** -40 C to +70 C
 - **Humidity** 0 to 95% non-condensing

900 MHz 6-Channel Receiver:

- RF:**
- **Frequency Range** 886 – 900 MHz
- Electrical:**
- **Video Output Format** NTSC or PAL
 - **Video Output Level** 1 V p/p
 - **Video Output Impedance** 75 ohm unbalanced
- Interfaces:**
- **Video Output** BNC Female, 75 ohm
 - **RF Input** BNC Female, 50 ohm
 - **DC Input** MS3112E10-6P military connector
- Power:**
- **Operating Voltage** 9 – 17 VDC
- Mechanical:**
- **Dimensions** .85" x 4.0" x 2.25"
 - **Weight** 8.5 Oz
 - **Material** Aluminum-engineered enclosure
 - **Color** Black
- Environmental:**
- **Operating Temperature** -20 C to +55 C
 - **Storage Temperature** -40 C to +70 C
 - **Humidity** 0 to 95% non-condensing

System Components

System includes:

- Camera w/Tilt/Pan/Zoom
- Carbon Fiber Tripod
- Monitor/Controller
- Digital Command & Control Radios
- Cables
- Antennas
- Video Receiver & Transmitter
- Weatherproof Case



For more information, contact sales@tserecon.com

1-800-889-4030