

# TACSIGHT<sup>SM</sup> S<sub>1</sub> Technical Specifications

## Overall TI Unit

Weight	With battery < 2.7 pounds (43 oz.) Without battery < 2.1 pounds (34 oz.)
Dimensions	Height : 4 3/4" Length : 4" Width : 7"
Heat Test	500°F (260°C) for 8 minutes 300°F (150°C) for 16 minutes
Water Resistance	IP67; 3 feet at 30 minutes
Impact	No permanent functional damage, 1.5 meter drop

## Casing

Shell Material	Ultem® Thermoplastic
Sealing	Silicone and Neoprene
Strap Material	Kevlar®
Display Cover	Polycarbonate (hardcoated)
Lens Cover	Germanium (2 mm thick)

## Core/Detector

Type	Uncooled Microbolometer with Digital Processing, Pixel Smoothing, and no Thermal Electric Cooler
Resolution	160 x 120 array
Sensing Material	Amorphous Silicon (aSi)
Spectral Response	8 - 14 Microns
Thermal Stabilization	0 - 70°C
Update Rate	20 Hz
Temperature Sensitivity	0.05° C
Video output	NTSC
NETD	<100 MK
Dynamic Range	<80°C
Pixel Pitch	46.8 um
Thermal Time Constant	<21 MSEL

## Lens (Standard)

Material	Germanium
Lens Size	25 mm
Field of View	12° x 17°
Focus	30 feet (10 meter) to infinity
Speed	f / 1.0

## Lens (Alternative)

Material	Germanium
Lens Size	8.5 mm
Field of View	35° x 50°
Focus	3 feet (1 meter) to infinity
Speed	f / 1.0

## Electrical System

Power Source	NiMH Rechargeable Battery or Alkaline Batteries (8 cells)
Output	10V Nominal
Capacity	1600 mA.hr
Operating Time	2.5 Hours Nominal
Start Up Time	5 Seconds Nominal
Charger Single Battery	120 VAC or 12 VDC
Switch Cycle Test	1,000,000 cycles
Battery Life	1,000 charge cycles
Battery Weight	0.6 pounds (9.5 oz)
Recharge Time	2 hours nominal

## Display

Type	Liquid Crystal Display (LCD)
Size	3" Diagonal (61.3 x 43.9 mm) TFT Active Matrix
Dot Pitch	188 mm (V) x .160 mm (H)
Dot Format	384 X 234 Dots
Pixels	89,856
Pixel Configuration	R-B-G Delta Configuration
Display Method	NTSC
Input Signal Level	1.0V P-P (Positive) 75 ohm
Back Light	Fluorescent Lamp
Brightness	400 cd/m2
Viewing Angle	Left/Right=60°, Up=35°, Down=60°

## Transmitter

Mounting	External
Signal Type	Analog
Antenna Type	Dipole
Transmitting Frequency	2.4 GHz
Power output	300 mW
Power Supply	Internal
Power Consumption	3.5 W
Frequency Selection	4 Channel Switch 2.456, 2.463, 2.470, 2.477 GHz
FCC License	Part 90

## Available Accessories



Powerhouse Charging Station



Transmitter Handle



Command Bag