# Gilat

# SatTrooper

## Fully Integrated and Lightweight Manpack

## Enabling Ubiquitous Broadband Connectivity

The net-centric battlefield has increased the importance of quick-deploy satcom-on-the-pause and on-the-move. Governments and militaries, already attuned to the advantages of fixed and mobile satellite services, recognize the critical need to access these services where and when needed, however challenging the conditions may be.

Gilat's lightweight, fast-to-deploy SatTrooper manpack tactical satcom terminal enables government agents and warfighters to accomplish their missions, offering rapid connectivity to data, voice and telephony, even under the harshest conditions. The small-size dish antenna can be set up within minutes, with automatic pointing, and does not require any special tools for assembly.

The SatTrooper is available in Ka or Ku band, and can operate as a terminal in a point-to-multipoint network or as a point-to-point link.

## Portable, Reliable, Capable

SatTrooper is highly integrated and ergonomic and is designed for maximum comfort and resilience. The antenna, built-in modem, BUC and LNB are incorporated in one ruggedized enclosure, and can withstand extreme environmental conditions. Low power consumption enables long hours of battery operation. The whole kit is easily packed into an ergonomic backpack that is easy to carry anywhere.

The SatTrooper embedded Gilat MLT-1000 modem supports reliable data, voice and video transmissions, with high availability in secure mode and excellent performance in extremely low SNR. The optional remote control unit (RCU) enables operation and configuration from a safe location or shelter.

## Benefits

- Fully integrated, compact manpack: antenna, modem, ACU and BUC

- Lightweight: only 13.5 Kg

- Long-lasting battery operation: more than 4 hours

- Automatic auto pointing

- Quick and easy setup: less than 3 minutes

- Ka or Ku band

- Remote control unit: safe operation



SatTrooper

# Technical Specifications

## Mechanical

**Antenna Size:**
**ST1500Ku:** 60cm
**ST2000Ka:** 60cm

## Electrical

**Frequencies Tx:**
**ST1500Ku:** 13.75–14.5 GHz
**ST2000Ka:** 29–31 GHz*
**Frequencies Rx:**
**ST1500Ku:** 10.7–12.75 GHz
**ST2000Ka:** 19.2–21.2 GHz*
**Polarization:**
**ST1500Ku:** Linear
**ST2000Ka:** Circular
**Tx Gain:**
**ST1500Ku:** 36 dBi
**ST2000Ka:** 43.5 dBi
**G/T:**
**ST1500Ku:** 14.9 dB/K
**ST2000Ka:** 17 dB/K
**EIRP:**
**ST1500Ku:** 42 dBW

**ST2000Ka:** 49 dBW
**Elevation:** 10–75 deg.
**Azimuth:** 270 deg. continuous
**Pointing:**
Elevation over Azimuth,
Automatic
**Skew/Polarization:** Manual
**Data rates:**
Over 2Mbps
(depends on link budget)
**Modulations:** BPSK, QPSK, 8PSK,
16QAM
**Spread Spectrum:**
Spreading factor 1–8

**SNR:** –13 to +13 dB
**Coding:**
27 LDPC codes. Rates 1/4, 1/3, 2/5,
1/2, 2/3, 3/4, 5/6, 8/9
**Typical Eb/No for BER=10–8:**
0.8dB (BPSK 1/2 LDPC 12k block
length)

## Data Com & Management

**Mode:** Dynamic routing or bridge
**Protocols:**
TCP acceleration, QoS, VLAN
**Management:**
Web manager and TotalNMS,
when part of the GLT network

## Size

**Dimensions:** 76Lx68Wx80H cm
**Weight:** 13.5Kg
14.9Kg(open unit), 19.9Kg(Bag).

## Environmental

**Temperature:** –20 to +60 deg. C
**Wind:** 45 Km/h
**Environment:** Mil Std 810 G
**Electromagnetics:** Mil Std 461 F
**MIL-STD-1275:**
DC characteristics

## Power and Interface

**Voltage:** 10–32 VDC
**Consumption:** 40 W
**Data:**
Ethernet 10/100/1000 Base–T
**Remote Control Unit (optional):**
Mimics the ST front panel: LEDs,
LCD and Control switches

\* Other frequencies in Ka band are available upon request