APPLIED INSTRUMENTS, INC.

RF TEST AND MEASUREMENT

VSAT 7850™

Satellite Meter

The VSAT 7850's extreme ruggedness, husky battery, ease of use, and versatility make this the ideal meter for professional VSAT satellite technicians.

A "must have" for those who value time-saving tools and demand quality, the VSAT 7850 is packed with features and capabilities. From satellite identification to recording proof of performance tests, you can align dish antennas, install, and troubleshoot the most challenging systems quickly and with confidence.

The VSAT 7850 is well suited for VSAT / Mobile Satcom, Military / Defense, Broadcasters, CATV Headend Satellite Antenna Farms, Teleports, and non-North American DBS / DTH (single and multi-dwelling) applications.

For more than 20 years installers have counted on Applied Instruments' popular meters: MDU, SAT 9520, Sat Buddy, Super Buddy, and AI Turbo S2. The legacy continues as the new VSAT 7850 meter raises the bar even higher.

Why it's the best:

- Positive ID with ID scan
- Geo-sensitive "field guide"
- Zip code lookup
- Easy operation
- Rugged Durability

"Reliability through Simplicity"

VSAT 7850 Satellite Meter

FEATURES

- Satellite ID by “align-to-lock” or “automatic scan”
- ID multi-lock algorithm eliminates false positives
- Powers LNBs and multi-switches
- Can use for L, C, X, Ku, or Ka band applications
- High sensitivity assures alignment optimization
- Field replaceable type F barrel connectors
- Durable aluminum case with rubber shock guards
- Geo-sensitive “Field Guide” software stores all compatible satellites and transponders per global region
- Controls multi-LNBFs/switches with 22kHz / DiSEqC tone
- Manual tune to custom transponders using front panel keypad
- Program and store up to 256 custom transponders
- Audible tone for signal lock and peak
- Quick charge battery with universal AC or vehicle 12 VDC
- Store measurements for Proof-of-Performance reporting
- “Limit Scan” Pass/Fail for key transponders
- Back-lit graphic LCD screen
- Numeric keypad with arrow key controls
- Rechargeable / Replaceable Li-Ion battery
- USB computer interface for firmware updates
- Operates while charging via AC
- Displays antenna settings (Az/El/Skew) based on user's postal code or latitude and longitude coordinates

MEASUREMENTS

- Demodulates DVB-S, DSS / DIRECTV Legacy, & DVB-S2 (CCM, ACM, & VCM) signals
- Signal Level (dBm, dBmV, or dBµV) with present and peak bar graph
- Signal Quality (IRD, C/N, Eb/No, or Es/No)
- Pre-FEC & Post-FEC BER (Bit Error Rate)
- PER (Packet Error Rate)
- Voltage output of IRD
- Current draw of LNB
- LNB frequency deviation (LNB LO drift estimate)
- Symbol Rate error
- Spectrum Screen (frequency on x-axis, amplitude on y-axis)
- Constellation Screen (I and Q demodulator values)

STANDARD ACCESSORIES

- Shoulder strap
- Cordura protective flap
- Universal AC switching power supply (100 VAC to 240 VAC Transformer)
- Automobile cigarette-lighter adapter battery charge cord (12V DC)
- PC data transfer cable (USB)
- Operation Manual
- Splitter (Single Side Power passing, 5-2150 MHz)

SPECIFICATIONS

Frequency Range	900-2150 MHz
Tuning Resolution	4 kHz
Signal Level Range	-75 to -15 dBm (-26 to +34 dBmV) (+34 to +94 dBµV)
Level Accuracy	+/-2 dB typical, 3 dB max
Signal Lock Formats	DVB-S (QPSK), DSS / DIRECTV Legacy (QPSK), DVB-S2 (QPSK, 8PSK, 16APSK, 32APSK, CCM, ACM, & VCM)
Impedance	75 Ohm
LNB Power	13VDC and 18VDC (current limited at 780mA), 21VDC (current limited at 520 mA), 29VDC (current limited at 360 mA)
Switch Control	22 kHz, DiSEqC
Battery	rechargeable Li-Ion, 4400mAh 12.6V Max
Run time/charge	4 hours for a single LNB (depends on LNB current draw)
Universal AC charger	100 to 240 VAC, 50/60 Hz fast charge and then trickle
Vehicle charger	12VDC
Computer Interface	USB
RF Connector	Double-F barrel field replaceable
Size/Weight	7.6”W x 6.7”H x 2.40”D / 3.2 lbs.
(without rubber guards)	19.3cm x 17.0cm x 6.1cm / 1450 g
Operating Temperature Range	-20°F to 120°F (-29°C to 49°C)
Battery Charge Temperature Range	41°F to 100°F (5°C to 38°C)
Warranty	12 month limited

Specifications are subject to change without notice.

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SALES REPRESENTATIVE: