VIKING SATCOM

Your Trusted Source for Satellite Equipment

Super Buddy 29™

Satellite Meter

Complete more installs faster and better using the Super Buddy 29™ Meter!

Be "sure of your bird" with the positive ID feature or use the automatic scan to identify the unknown satellite.

Tired of loading new satellite plans? Super Buddy 29's geo-sensitive "Field Guide" shows you just the birds visible to your install — ALL of them, and their individual transponders.

Navigate easily from bird to bird with left/right arrows and through individual transponders with up/down arrows. It's the BEST and the EASIEST!

Don't know the angles for your antenna? The zip code look-up gives you elevation and azimuth for whichever satellite you select.

Multi-switch control? DiSEqC? "They're in there."
Durability? "The best."
Voltage/current measurements? "Of course."
HughesNet cross-pol? "That too."
Signal compatibility? "DSS, DVB-S, Digicipher 2 and Dish 8PSK. Wow!"

Satellite delivery is becoming more complex, but the Super Buddy 29 makes it easier! Handle the toughest jobs better, faster and cheaper with Super Buddy 29.

Why it's the best:

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

"Reliability through Simplicity"

Super Buddy 29™

Satellite Signal Level Meter

FEATURES

- ID the satellite by "align-to-lock" or "automatic scan"
- Positive ID multi-lock algorithm eliminates false positives
- Field replaceable connectors
- Rugged durable aluminum case with rubber shock guards
- Geo-sensitive "Field Guide" software stores all satellites and transponders per global region
- Zip code or Lat/Long entry provides antenna azimuth, vertical angle, and tilt/skew settings for all satellites
- Controls multi-LNBs/switches with 22kHz/DiSEqC
- Large back-lit graphic LCD
- Easy to use single function front panel buttons
- Displays cross-pol value from HughesNet Ku Band modems
- Able to manually enter new satellites using front panel keypad
- Audible tone for signal lock and peak
- Quick charge battery with universal AC or vehicle 12 VDC
- USB computer interface for future upgrades
- Store measurements for proof-of-performance "POP Scan"
- Pass/Fail for key transponders "Limit Scan"
- Provides power to LNBs, including the new DIRECTV SWM LNBF models and WildBlue TRIA
- LOCKs on new multi-rate/ACM signal style used by WildBlue and Telesat/Xplornet

MEASUREMENTS

- Signal Level (dBm, dBmV, dBuV) with present and peak bargraph
- Signal Quality, familiar IRD value with present and peak bargraph
- Carrier-to-noise ratio (dB)
- Bit Error Rate (Reed Solomon)
- Voltage supplied by IRD
- Current drawn by LNB
- LNB frequency deviation to check for LNB drift
- Spectrum Display (frequency on x-axis, amplitude on y-axis)
- Constellation Display (I and Q values)

STANDARD ACCESSORIES

- Shoulder strap
- Cordura protective flap
- AC Line Cord for charging battery (built-in 100 to 240 VAC Transformer)
- Automobile cigarette-lighter adapter battery charge cord
- PC Download cable (USB)
- Operation Manual
- Training video (DVD format)
- Power passing splitter (950-2150 MHz)

OPTIONAL ACCESSORIES

- NS-1 Broadband Noise Generator – for use with Super Buddy Noise Scan feature to check coax cable integrity

SPECIFICATIONS

Frequency Range	950-2150 MHz
Tuning Resolution	Individual Transponders
Signal Level Range	-70 to -10 dBm (-21 to +39 dBmV) (+39 to +99 dBµV)
Level Accuracy	+/-2 dB typical, 3 dB max
Signal Lock Formats	DSS, DVB-S, Digicipher 2, 8PSK Turbo CCM & ACM
Impedance	75 Ohm
LNB Power	13VDC for V/R and 18VDC for H/L (current limited at 750 mA), 21VDC for DIRECTV SWM LNBs (current limited at 400 mA), 29VDC for Wild Blue TRIAs (current limited at 325 mA)
Switch Control	22 kHz, DiSEqC, DISH Legacy
Battery	rechargeable NiMH 7.2V, 3.0 Ah
Run time/charge	3 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 (without rubber guards)	6.8"W x 6.4"H x 3.2"D / 2.9 lbs. 17.3cm x16.3cm x 5.8cm / 1.3kg
Temperature Range	0° to 125°F (-17°C to 51°C)
Warranty	12 month limited

Specifications subject to change without notice.

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Comparison of Applied Instruments Satellite ID Meters

Which Applied meter is right for you? If your primary work is:

- DIRECTV – the AI Turbo S2 is the best choice
- Dish Network, Bell TV, Shaw Direct – the Super Buddy is a fine choice, but the AI Turbo S2 is the best choice with a better battery, faster processing & lock, and more storage
- C band video broadcast satellite reception (i.e. satellite antenna farms at CATV headends) – the AI Turbo S2 and the VSAT 7850 are both fantastic choices
- VSAT / Mobile Satcom / Broadband / Data Terminal applications – the VSAT 7850 is the best choice
- Hughes (Ku Band or Jupiter Gen 4 Ka Band) – the VSAT 7850 is the best choice
- Commercial Low Ku Band (i.e. uplink trucks, teleports) – the AI Turbo S2 is fine, but the VSAT 7850 is the best choice
- DBS / DTH outside of North America – the VSAT 7850 is the best choice

	SUPER BUDDY™/ SUPER BUDDY 29™	AI TURBO S2	VSAT 7850
FEATURES			
Satellite ID verification	YES	YES	YES
Auto scan satellite ID	YES	YES	YES
Field Guide database of all regional transponders	YES	YES	YES
Manual tune to custom transponders	YES	YES	YES
Store custom satellites & transponders in meter		YES	YES
Audible tone for signal lock or peak	YES	YES	YES
Azimuth/elevation/skew calculations	YES	YES	YES
U.S. zipcode lookup of lat/long	YES	YES	YES
Canadian postal code lookup of lat/long	YES	YES	YES
Zipcode lookup of 1st Gen WildBlue spot beams	YES	YES	
Dish Network limit scan thresholds	YES	YES	YES
Built-in time and date clock		YES	YES
Tuning resolution	4KHZ	4KHZ	4KHZ
Frequency Range	950-2150 MHZ	250-2150 MHZ	900-2150 MHZ
BATTERY			
Type	NI-MH	LI-ION	LI-ION
Voltage (nominal)	7.2 V	11.1 V	11.1 V
Rating	3600 MAH	4400 MAH	4400 MAH
Capacity (Watt hours)	25.92 W-HR	48.84 W-HR	48.84 W-HR
Universal AC charger (100VAC to 240VAC)	YES	YES	YES
12VDC vehicle adapter	YES	YES	YES
Quick charge	YES	YES	YES
Easily replaceable		YES	YES
Operates while charging	YES	YES	YES
Battery level & charge status monitoring	LIMITED	COMPREHENSIVE	COMPREHENSIVE
PHYSICAL			
Field replaceable F connectors	YES	YES	YES
Rugged case with rubber shock guards	YES	YES	YES
USB computer interface for firmware updates	YES	YES	YES

	SUPER BUDDY™/ SUPER BUDDY 29™	AI TURBO S2	VSAT 7850
LNB POWER			
13V, 18V LNB power	YES	YES	YES
21V, 29V LNB power	YES (SUPER 29)	YES	YES
DiSEqC and 22kHz switch control	YES	YES	YES
SIGNAL COMPATIBILITY			
DVB-S – QPSK (legacy video std)	YES	YES	YES
DSS / DIRECTV Legacy – QPSK	YES	YES	YES
Digicipher 2 – QPSK & OQPSK (Shaw Direct, some C-Band)	YES	YES	
Turbo – QPSK/8PSK (Dish Network HD, Shaw Direct HD, Bell TV HD, Gilat)	YES	YES	
DVB-S2 – QPSK/8PSK CCM (modern broadcast std.)		YES	YES
DVB-S2 – QPSK/8PSK/16APSK/32APSK CCM			YES
DVB-S2 – QPSK/8PSK/16APSK/32APSK ACM / VCM (VSAT - Hughes, iDirect, etc.)			YES
DIRECTV 99 & 103 Ka Signal Level	YES	YES	YES
DIRECTV 99 & 103 Ka Quality Estimate (No lock)		YES	
SWITCH CONTROL			
22kHz	YES	YES	YES
DiSEqC	YES	YES	YES
Dish legacy and DishPro	YES	YES	YES
FSK (for DIRECTV SWM Sat/Transponder selection)		YES	
MEASUREMENTS			
Signal Level (dBm, dBmV, dBµV)	YES	YES	YES
Signal Quality (IRD, C/N, Eb/No, Es/No)	YES	YES	YES
IRD / IDU Voltage	YES	YES	YES
LNB Current Draw	YES	YES	YES
LNB LO Frequency Drift	YES	YES	YES
Post-FEC BER	YES	YES	YES
Pre-FEC BER		YES	YES
Framing errors		YES	
PER			YES
Symbol Rate Error		YES	YES
DIRECTV B-Band without B-Band Converter		YES	
TESTS			
Proof of Performance	YES	YES	YES
Limit Scan for key transponders	YES	YES	YES
Constellation Screen (I and Q values)	YES	YES	YES
Spectrum Screen	YES	YES	YES
Spectrum with reference line		YES	YES
Spectrum normalized to reference (w/cable loss)		YES	YES
Noise Scan	YES	YES	YES
IRD DiSEqC command reader	YES	YES	YES
Displays cross-pol value from Hughes Ku Band modems	YES	YES	YES
DIRECTV SWM system receiver utilization		YES	
Multi-satellite screen (DIRECTV SWM only for now)		YES	
DATA STORAGE / UPLOAD / PRINTED REPORTS			
Proof of Performance Scan	YES	YES	YES
Limit Scan	YES	YES	YES
Spectrum Scan		YES	YES
Flash Memory Storage for saved Scans	64KB	256KB	256KB
Date stamps on saved Scans	YES	YES	YES
Time stamps on saved Scans		YES	YES

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