UNAOHM ®

S 22

DVB-S
QPSK Demodulation
NIT

ProSat S22

►**S 22**

►**S 22 Plus (NIT+ASL)**

DVB — Digital & Analogue Sat Analyser

►Wide dot matrix 128x64 graphic display

►NIT (Network Identification Table)

►Quasi-Real Time spectrum display

►Real BER measurement in DVB-S

►Automatic SAT detection by means of the "ASL" function

►Advanced Data Logger

►Ni-MH Battery - RS-232 port - Antishock rubber holster

Digital Video Broadcasting

Full SAT frequency range coverage. Dynamic range: 25-120dBµV.
Features: DCP, level.
Measurements: BER, RU, MER and CFO in QPSK. LNB 13-18V power supply and control up to 350mA
DiSEqC 1.1 and 1.2 (motorized dishes).

S 22

Specs subject to change without notice

SPECIFICATIONS

UNAOHM

INPUT

Level
40 to 120 dBµV from 920 to 2150 MHz: Analogue SAT, 1 MHz BW
44 to 124 dBµV from 920 to 2150 MHz: 30 MHz BW digital signal
Aural tone proportional to signal level

Unit of Measure
dBµV - dBmV - dBm

Attenuator
0 to 50 dB in 10 dB steps. Manually or autoranging

Attenuator Accuracy
± 2 dB

Frequency Response Accuracy
± 2 dB throughout the entire frequency range

Measurement Bandwidth (RBW)
5 Mhz

Input Impedance
75 Ohm unbalanced. (1)

Input Connector
Female "F" connector with a protective L-shaped adapter

Maximum Applicable Voltage
± 100V DC and 5 Vpp RF

LCD Indication
-Numeric for level, four digit, 0.1 dB resolution
-Numeric for DCP, four digit, 0.1 dB resolution
-Analogue by means of a bargraph
-Analogue by means of a histogram

FREQUENCY

Frequency range
920 to 2150 MHz

Tuning Selection
-By frequency. Continuous PLL frequency synthesis in 125 kHz steps
-By program. Recall of any program out of those stored, up to 100 programs

Frequency Reading
Frequency reading is rounded off to the nearest 100 kHz in the 1st IF mode, to the nearest MHz in L.O. Mode

SPECTRUM

Functions
-Spectrum (full and expanded). 200, 100, 50, 20, 10 MHz expansion steps from 920 to 2150 MHz
-Histogram mode. Up to 28 user-defined-Program
-Hold max, Hold min, Freeze

Marker
-Two independent markers for frequency and level reading; reading of differences between markers on LCD readout

DATA LOGGER

-Approximately 1500 single program data-captures (acquisitions)

QPSK DISPLAY

Parameter Setting
-Symbol Rate: 1.45 to 36 MS/s
-Code Rate: Automatic
-Spectrum Polarity: Automatic

Locking Indication
"LOCKED", "UNLOCKED" indication on LCD readout

CH BER Measurement
0 to 1. $2*10^{-7}$ Resolution

CH BER Display
-Numeric : in exponential notation
-Analog : via a bargraph (the longer the bar the better the BER)

post Viterbi BER Measurement
0 to $5*10^{-2}$. $2*10^{-8}$ resolution. Numeric reading

MER
5 to 20 dB. Numeric reading

RU count
Counting of uncorrected errors past the Reed Solomon algorithm, up to 65535 max Count

Power index
LOw, **OK**, **HI**gh for low, correct, high level

CFO
Shows the offset from nominal centre frequency in MHz

AUXILIARY INPUTS & OUTPUTS

Power to LNB
-0; 13; 18 V ± 0.5V. Selectable. 350 mA max current
-Overload warning indication and continuity of external circuit provided

22 kHz Tone
22 kHz ± 1 kHz / 0.6 Vpp tone. Square wave

DiSEqC Command
DiSEqC 1.1 and 1.2 (for steerable dishes) protocols

NIT CARD (S22 option, Standard on Plus)

Standard
DVB compatible

ASL - Automatic Satellite Locator (Standard on Plus)

Pass/No-pass function for fast satellite detection

LCD READOUT

Type
Dot matrix graphic LCD; 128 x 64; LCD retroilluminated.71 x 39 mm(W x H)

OUTPUT

Source of Power
For remote control. Sourced from the RF IN connector: 0, 13, 24 V ± 0,5V / 350 mA max; switchable. Overload and continuity indication of the external circuitry

RS 232
Female, 9 pole, "D" connector for data exchange with an external PC or printer

POWER SUPPLY

Internal Vdc Power
6 V / 3.8Ah Ni-MH rechargeable battery pack. 1½ hours continuous operational run (when current draw to LNB is 100 mA max.)

External Vdc Power
-7.5 to 8 V / 3 A max for operation and battery charge
-5.5 to 8 V / 3 A for operation only

Mains
100 to 240V AC through an external power supply/charger unit, provided

Battery Charger
Through external power supply/charger unit, provided. 8 hours charging time

MECHANICAL

Dimensions and Weight
200x105x45 (7.8"X4.1"X1.7") 0.9 kg with battery pack and holster included

Finishing
The unit comes with a sturdy antishock protective rubber holster

AMBIENT

Operating Temperature
5 °C to + 40 °C

Relative Humidity
80 % for a temperature up to 31 °C (linear derating to 50 % @ 40 °C)

Storing Temperature
-10 °C to +60 °C

STANDARD ACCESSORIES

• L-shaped F/F input adapter
• Rubber holster
• Neck and transport strap
• Instruction Manual
• Power Supply/Charger Unit BCH 7.5/3.3
• 6 V / 3.8 Ah Ni-MH battery pack

OPTIONS

• NIT card (**no for Plus version**)
• Spare waistband-held battery pack BP6
• Nylon bag for transport C20
• STP 165 external printer

SPECIAL FEATURES

(1) 50 Ohm input impedance

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