

## Signal meters Sat/TV/FM



<b>MSK 25</b>	21710012	
<b>MSK 25/M</b>	21710017	
<b>MSK 25/TM</b>	21710014	

Selective signal meter for measuring analogue and digital satellite, cable and terrestrial signals.

With high-quality 4" TFT colour display. Display of Bit Error Rate (BER) and Modulation Error Rate (MER) facilitates quality evaluation of DVB signals. QAM 256 signals can also be measured with the MSK 25. Calibrated spectrum representation with a repetition rate of approx. 2 seconds. A separate, 2-line, 16-digit LCD showing the measuring results facilitates the optimal alignment of reception systems.

The meter comes in a screened metal housing and sturdy black leather case with straps and is available in three feature variants.



### Features

#### MSK 25

- Level measurements of analogue and digital TV signals (DVB-S, DVB-C, DVB-T)
- Picture representation of analogue TV signals
- BER measurement and display of DVB-C signals (QAM 64, 128, 256)
- BER measurement and display of DVB-S signals (QPSK)
- MER display in the range of up to approx. 32 dB
- 4"-TFT/colour LCD
- Two-line, 16-digit LCD
- Spectrum representation
- Level display in dBμV or optional dBmV

- Acoustic signal for antenna alignment
- C/N weighting
- Automatic selection of measurement range
- Direct frequency and channel entry
- Measurement and display of remote feed current
- Audio carrier measurement (TV)
- NICAM audio carrier and BER measurement
- Audio control via integrated loudspeaker
- DiSEqC™1.0 control signal
- Interface for software updates
- Suitable for mains and battery operation

#### MSK 25/M

- Equivalent to MSK 25, but with MPEG card for picture representation of digital TV signals (DVB-C, DVB-S)

#### MSK 25/TM

- Equivalent to MSK 25/M, but with DVB-T card to receive digital terrestrial signals (DVB-T)
- BER/MER measurement and display (DVB-T)
- Free DVB-T signals are displayed
- Demodulation: 2k and 8k mode

## Technical data

Typ		MSK 25	MSK 25/M	MSK 25/TM
Order no.		21710012	21710017	21710014
Features				
Basic version		■	■	■
MPEG module		-	■	■
DVB-T module		-	-	■
RF range				
Frequency range	MHz	TV: 48 ... 858, Sat: 920 ... 2,150, FM: 88 ... 108		
Frequency resolution	kHz	TV/FM: 50; SAT: 100		
TV standards		B/G, I, D/K, L,		
DVB standards		DVB-S (QPSK), DVB-C (QAM 64, 128, 256)	DVB-S (QPSK), DVB-C (QAM 64, 128, 256)	DVB-S (QPSK), DVB-C (QAM 64, 128, 256), DVB-T (COFDM 2k, 8k)
DVB-T channel bandwidth	MHz	-	-	6, 7, 8
TV system				
Colour standards		PAL/NTSC in colour; SECAM in b/w		
Audio		FM, NICAM and AM sound		
Level measuring element				
Measurement range	dBμV	30 ... 120		
Accuracy of measurements	dB	± 2		
Measuring bandwidth	MHz	TV/FM: 0.25; DVB-S/-C/-T: 6		
Detector analogue		TV: peak value, SAT/FM: average value		
Detector digital		Average value		
Digital measurement parameters				
BER/MER/carrier offset (DVB-S/DVB-C)		■ <sup>1)</sup>	■ <sup>1)</sup>	■ <sup>1)</sup>
BER/MER/carrier offset (DVB-T)		-	-	■ <sup>1)</sup>
Display				
TV screen <sup>1)</sup>		TFT colour display 4", 238 x 480 pixels, 250 cd/qm		
LCD		Alphanumeric 2 x 16-digit, bargraph, illuminated		
Sat-adjusting aid (acoustic)		Level-dependent whistle		
Supply voltages				
Power supply	V/Ah	Integrated lead-battery 12/3.4		
Mains supply	V AC	230 (external power supply unit)		
Remote feeding	V/mA	0, (5) 10 ... 20, max. 500, (5 ... 10, max. 100)		
LNB controller	kHz	22, DiSeqT <sup>TM</sup> 1.0		
Connections				
RF input/impedance	-/Ω	BNC socket/75		
TV/audio output		Scart (comp. colour output, audio mono output)		
DC voltage supply	mm	Hollow plug 5.5/2.1		
Data interface for software downloads		RS 232 (Sub D 9-pin)		
General				
Safety standard		Protection category II		
Housing		Metal housing in leather case with straps		
Dimensions	mm	Approx. 95 (120) x 260 x 160; ( ) incl. case for accessories		
Weight	kg	Approx. 4.5 (incl. leather case)		
Delivery scope		Power supply unit, measuring cable with adaptor , 20-dB pre-attenuator		

<sup>1)</sup> BER and MER measurement and picture representation of digital signals possible up to an input level of approx. 100 dBμV.  
For higher levels the 20-dB 20-dB pre-attenuator included in the delivery scope is to be used.