

## **ADAM 3000**

**BN: 86902.000BF**



## **ADAM 3000**

**Analogue and Digital Antenna Measurement System**

With ADAM 3000 Schomandl presents a measure instrument of the latest generation in compact mounting form, tabletop unit and also as black box, which leaves nothing to be desired for tests of antenna- and cable-installations, even including professional head-ends.

As a matter of course our development goes into details relating to requests for customised instruments.

## **Features**

- Manageable, portable or desk-measure-instrument
- High resolution 8,4" TFT – Colour display 800 x 600 pixel ( SVGA ) for analogue and digital TV-Signals and exposition graphic design
- Special backlight, thus excellently readable also in bright sunlight ( type. 600 cd/m<sup>2</sup> )
- Easy to operate using 12 hard keys and infra-red touch screen for menu navigation
- Alphanumeric keypad screen for entering text and numbers.

## **Functions**

- MER – measurement for all digital modulation types
- BER – measurement pre and post Viterbi
- Spectrum analyser
- Simultaneous spectrum and picture analysis
- Variable start/stop frequency for spectrum analysis
- Storage oscilloscope
- Constellation analyser
- MPEG-und analogue TV-Monitor
- Demodulation of analogue signals: AM (CATV, Terr.), FM (Sat, Radio)
- Demodulation of digital signals: DVB-C, DVB-T, DVB-S  
( DVB-S2 in development )
- Demodulation of digital USA-Standards (J83B, DOCSIS, ATSC)
- Video – measurement options: video amplitude with line selection, S/N measurement, hum measurement
- Oscilloscope with large result display ( zoom-in on selected signal selection ) with numerical value display
- Transmitter selection for DVB-C, DVB-S, DVB-T and analogue via frequency input, channel input and user lists
- Remote control via Ethernet, RS 232 and PCMCIA module (analogue Modem, GSM-Modem, Bluetooth, WLAN)
- Display of SID, PMT-PID, PCR-PID, CA-Info, elementary current PID and type
- Measured value detection

- Automatic measurement process
- Automatic measurement for CTB, CSO
- Return path measurements
- Measurement units: dB $\mu$ V, dBmV, dBm,  $\mu$ V, mV
- DiSEqC™ - monitor
- Multimeter for LNB -supply
- Expansion slots (e.g. for DVB-S2)

**Lieferumfang:**

**1 power cord, 1 fuse T 8,0 A**

**The soft carrying Bag has to be ordered separate**

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**Added for 75 Ohm Version:**

- 1 measurement cable – BNC plug – BNC socket
- 1 Adaptor - 1,6/5,6 plug – BNC - socket
- 1 Adaptor - BNC- socket - F- socket
- 1 Adaptor - BNC- socket - F- connector
- 1 Adaptor - BNC- socket - IEC- socket
- 1 Adaptor - BNC- socket - IEC- plug
- 1 fuse T 8,0 A

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**Technical data ADAM 3000**

<b>Spectrum analyser</b>	
Frequency range	5 MHz – 3.100 MHz
Resolution bandwidths (-3dB)	0,0011 MHz – 10 MHz
Resolution bandwidths(-6dB)	9 KHz, 25 KHz, 50 KHz, 120 KHz, 200 kHz
Video bandwidths	0,00001 MHz – 3 MHz
Phase noise at 10 kHz carrier spacing	<-90 dBc (1Hz) / typ. -95 dBc (1Hz)
Phase noise at 100 kHz carrier spacing	<-100 dBc (1Hz) / typ. -110 dBc (1Hz)
Dynamic (RBW 100 kHz)	typ. 70 dB
Level measuring range	20 – 130 dB $\mu$ V
Measurement accuracy	< 1,5 dB
Measurement detector	Max Peak, Min Peak, Auto Peak, Sample, RMS
Return loss (5dB pre-attenuation)	< 16 dB (VSWR 1,35)
Refresh rate	max. 10 Picts / sec.
Reference level	30 dB $\mu$ V bis 130 dB $\mu$ V
Display range	100 dB, 50dB, 20dB, 10dB
Screen resolution	Max. 800 x 600 / rated 501 x 401 Pixel
<b>Analogue TV – receiver</b>	
Standards	B/G, I, D/K, L/L', M/N
Colour standards	PAL, SECAM, NTSC
Audio standards	IRT-A2, NICAM, BTSC, EIA-J
Frequency increment	50 kHz
Video IF bandwidth	According to standard

Audio IF bandwidth	According to standard
Video- output voltage	1 Vss / $75 \Omega \pm 1$ dB
Hum measurement	> 50 dB
S/N-measurement (weighted acc. to CCIR Rec. 567)	> 55 dB / typ. 57 dB
<b>Analogue SAT- receiver</b>	
Standard	FM according to CCIR Rec. 405
Colour standards	PAL, SECAM, NTSC
Audio standards	Deemphasis. 50µs / Panda-Wegener 75µs
Frequency increment	200 kHz
IF - bandwidth	27MHz, 36MHz
Audio IF bandwidth	130kHz, 380kHz
Video- output voltage	1 Vss / $75 \Omega \pm 3$ dB
Hum measurement	> 50 dB
S/N-measurement (weighted acc. to CCIR Rec. 567)	> 55 dB / typ. 60 dB
<b>Digital TV- receiver</b>	
Modulation process	QPSK, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 8VSB
Symbol frequency (depending on demodulator) QAM / ATSC	QAM/ATSC 2,0 – 6,999 MHz
Frequency increment	50 kHz
Video-output voltage	1 Vss / $75 \Omega \pm 1$ dB
IF - bandwidths	1,5MHz, 6MHz, 7MHz, 8MHz, 12MHz
MER-measurement	> 35 dB
<b>Digital SAT- receiver</b>	
Modulation process	QPSK
Symbol frequency QPSK	2 – 45,0 MHz
Frequency increment	200 kHz
IF bandwidths	8MHz, 18MHz, 27MHz, 36MHz, 54MHz
Video-output voltage	1 Vss / $75 \Omega \pm 1$ dB
MER - measurement	> 14 dB
<b>Constellation analysis</b>	
DVB-C	QPSK, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
DVB-T	QPSK / 16 / 64-QAM
DVB-S	QPSK
ATSC	8-VSB
<b>Storage oscilloscope</b>	
Resolution	12 Bit
Scanning rate	54 MHz
Memory depth	1 Pict. / Video
<b>Remote feeding</b>	
Switching voltage/max. current	5V – 20V / 500 mA
Control signals	22 kHz / Tone Burst / DiSEqC™ 2.0 UFO®-µ-DiSEqC™
<b>Power Supply</b>	
Mains ( power supply unit )	100V – 250V / 50Hz – 400Hz / 62W
Lithium / ion battery	11,1V / 6Ah
DC - external	10,8V – 14,0V
<b>Connections</b>	
HF- standard input / impedance	1,6 / 5,6 ( $75 \Omega$ )
Comp. Colour in/output/RGB-output	Scart socket
Video in/output	2 x BNC-socket
Transport stream in/output	2 x 25-pin. SUB-D-socket

ASI in/output	2 x BNC
Common Interface / card reader	1 / 1
PCMCIA - insert	1
Network connector	1 x Ethernet
USB-port	2
External keypad	PS-2
External mouse	USB
Headset connector	3,5 mm jack
Modem interface	RS 232 / Sub-D 25-pin. socket
DC - supply 12 V	XLR-socket
<b>General</b>	
Monitor	8,4“; 800 x 600 Pixel backlight
Temperature range	+ 5 °C to + 45 °C
Dimensions ( W x H x D )	Approx.. 374mm x 276mm x 108mm
Weight	ca. 7,6 kg

### Options:

<b>Order Numbers and Options</b>	
ADAM 3000, 75Ω	BN: 86902.000 BF
ADAM 3000, 75Ω, 19“ Einbau	BN: 86902.001 BF
ADAM 3000, 50Ω	BN: 86902.002 BF
ADAM 3000, 50Ω, 19“ Einbau	BN: 86902.003 BF
<b>Options</b>	
External 10 MHz Reference, OCXO	BN: 86902.104 BF
Automobile battery charger leads	BN: 86902.105 BF
MZV10 (75 Ω preamplifier up to 1GHz with FM-latch)	BN: 86902.102 BF
MZV50 (50 Ω preamplifier up to 1GHz with FM-latch)	BN: 86902.103 BF
RS 232 Kabel	BN:
Carrying bag leather as alternative	BN: 86902.101 BF

Schomandl reserves the rights to amend prices and specifications without prior notice.

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