

Selective measurement of high frequency electromagnetic fields



Complete, easy to use test system, consisting of a base unit and measuring antennas, for non-directional detection of fields and their sources in the frequency range from 9 kHz to 6 GHz

- ▲ **Measurements conforming to ICNIRP and national standards with results displayed directly in terms of the permitted limit value**
- ▲ **Fast, reliable results using predefined measurement routines, setups, and automatic settings**
- ▲ **Extrapolation to maximum exposure levels and evaluating pilot signal information with LTE - FDD/TDD and UMTS operating modes**
- ▲ **Scope mode for short term analysis of pulsed signals and long term recording of variable exposure levels**
- ▲ **Editable tables for automatic correlation of results with telecommunications services (e.g. broadcasting, GSM, WiMAX)**
- ▲ **Individual preparation of field campaigns with subsequent evaluation and handling of large quantities of measurement data**
- ▲ **Suitable for outdoor use: Radiation protected, robust, splash-proof, ergonomically designed; uses exchangeable rechargeable batteries; equipped with integrated GPS and voice recorder**



THE SRM AND ITS APPLICATIONS

The Selective Radiation Meter SRM is a compact, frequency-selective measuring system for safety analysis and environmental measurements of high-frequency electromagnetic fields. It covers broadcasting, mobile telephony, and industrial frequencies from the lowest long-wave range up to the latest wireless applications and evaluates the field exposure level in accordance with international or national standards.

Where the field environment is unknown – in offices, factory buildings, public places, or private homes – the SRM provides authorities and measurement service providers with a rapid overview of the field sources that are relevant to human safety.

Where the field situation is known, such as at so-called “shared sites”, where several service providers share a common antenna site, the SRM shows the overall field exposure level as well as the proportions due to each service as an absolute value or as a percentage of the permitted limit value.

Users can resolve services down to individual channel accuracy and measure their contribution to the field emission with the SRM. It is also possible to integrate over the entire frequency range of the service and display the absolute result or the value relative to the permitted limit.

OPERATION AND USE

All functions and parameters can be set directly on the SRM basic unit via menus and the numerical keypad, softkeys, or the rotary control. As well as this, the SRM also provides facilities for saving and recalling measurement settings (setups) and entire measurement sequences (routines). The PC software included with the device, “SRM-3006 Tools”, includes editable tables for antennas and cables from other manufacturers, user-defined evaluation curves, and lists of services and operators.

OPERATING MODES

The SRM is designed for everyday use and has operating modes tailored to the main areas of application: Safety Evaluation, Spectrum Analysis, Level Recorder, Scope, UMTS and LTE. Details about these operating modes and other functions are given in the Specifications.

ANTENNAS

Narda offers a broad range of three-axis and single-axis measuring antennas for electric fields (E-fields) and magnetic fields (H-fields). The three-axis antennas are advantageous in practice because they give isotropic (i.e. non-directional) results automatically.



DEFINITIONS AND CONDITIONS

Conditions

Unless otherwise noted, specifications apply after 30 minutes warm-up time within the specified environmental conditions. The product is within the recommended calibration cycle.

Specifications with limits

These describe product performance for the given parameter covered by warranty. Specifications with limits (marked as $<$, \leq , $>$, \geq , \pm , max., min.) apply under the given conditions for the product and are tested during production taking measurement uncertainty into account.

Specifications without limits

These describe product performance for the given parameter covered by warranty. Specifications without limits represent values with negligible deviations which are ensured by design (e.g. dimensions or resolution of a setting parameter).

Typical values (typ.)

These characterize product performance for the given parameter that is not covered by warranty. When stated as a range or as a limit (marked as $<$, \leq , $>$, \geq , \pm , max., min.), they represent the performance met by approximately 80 % of the instruments. Otherwise, they represent the mean value. The measurement uncertainty is not taken into account.

Nominal values (nom.)

These characterize expected product performance for the given parameter that is not covered by warranty. Nominal values are verified during product development but are not tested during production.

Uncertainties

These characterize an interval for a given measurand estimated to have a level of confidence of approximately 95 percent. Uncertainty is stated as the standard uncertainty multiplied by the coverage factor $k=2$ based on the normal distribution. The evaluation has been carried out in accordance with the rules of the "Guide of the Expression of Uncertainty in Measurement" (GUM).

SPECIFICATIONS ● BASIC UNIT

Basic Unit SRM-3006				
MODES				
Operating modes	Measurements vs. frequency	<ul style="list-style-type: none"> ● Spectrum Analysis ● Safety Evaluation 		
	Measurements vs. time (Zero Span)	<ul style="list-style-type: none"> ● Level Recorder ● Scope (Option) 		
	Measurements on mobile networks	<ul style="list-style-type: none"> ● UMTS P-CPICH Demodulation (Option) ● LTE (for FDD networks) (Option) ● LTE (for TDD networks) (Option) 		
RF DATA ^{a)}				
Frequency	Frequency range	9 kHz to 6 GHz		
	Resolution bandwidth (RBW)	See specifications for each mode		
	Phase noise (SSB)	< -100 dBc/Hz (@ 300 kHz carrier offset)	verified at (57.5 / 2140.5 / 4500.5) MHz	
	Reference frequency	Initial deviation < 1 ppm Aging < 1 ppm/year, < 5 ppm over 15 years Thermal drift < 1.5 ppm (-10 °C to +50 °C)		
Amplitude	Display range	From Displayed Average Noise Level (DANL) to +20 dBm		
	Measurement range (MR)	-30 dBm to +20 dBm in steps of 1 dB		
	RF Input attenuation	0 to 50 dB in steps of 1 dB (coupled with measurement range MR)		
	Measurement range setting	Set individually from a list or using the "MR Search" function for determining the optimum measurement range at a given time		
	Level uncertainty	≤ 1.2 dB (15 °C to 30 °C) valid for Spectrum Analysis and Safety Evaluation modes		
	Displayed Average Noise Level (DANL)	f ≤ 30 MHz: < -160 dBm/Hz (noise figure < 14 dB) f ≤ 2 GHz: < -156 dBm/Hz (noise figure < 18 dB) f ≤ 4 GHz: < -155 dBm/Hz (noise figure < 19 dB) f ≤ 6 GHz: < -150 dBm/Hz (noise figure < 24 dB)	MR = -30 dBm (RF input attenuation = 0 dB)	
	3 rd order intermodulation	< -60 dBc for two single tones with a level of 6 dB below MR, spaced by 1 MHz or more		
	Spurious responses (input related)	< -60 dBc or MR-60 dB (whichever is worse) and a carrier offset of 1 MHz or more		
	Spurious responses (residual)	< -90 dBm (MR = -30 dBm, RF input attenuation = 0 dB) For (294 to 306) MHz and (4534 to 4586) MHz limited to < -85 dBm		
	RF input	Type	N-Connector, 50 Ω, female	
Maximum RF power level		+27 dBm (destruction limit)		
Maximum DC voltage		±50 V		
Return loss		> 12 dB (typ.), f ≤ 4.5 GHz > 10 dB (typ.), f > 4.5 GHz	MR ≥ -28 dBm (RF input attenuation ≥ 2 dB)	

a) RF data apply in the temperature range of 20°C to 26°C and a relative humidity between 25 % and 75 %.

MODE SPECTRUM ANALYSIS		
Measurement principle	Spectrum analysis	
Resolution bandwidth RBW, (-3 dB nominal)	10 Hz to 20 MHz (in steps of 1, 2, 3, 5, 10, 20, ...)	
Video bandwidth VBW	Off, 0.2 Hz to 2 MHz (in steps of 1, 2, 3, 5, 10, 20, ... coupled with selected RBW)	
Filter	Type	Gaussian
	Shape factor (-60 dB/ -3 dB)	3.8 typical
Result types	Individually selectable traces for:	
	Act:	Displays instantaneous (actual) spectrum
	Max:	Maximum hold function
	Avg:	Average over a selectable number of spectra (4 to 256) or a selectable time period of 1 to 30 minutes
	Max Avg:	Maximum hold function after averaging
	Min:	Minimum hold function
	Min Avg:	Minimum hold function after averaging
	Standard:	Display of the selected safety standard
	SAVG:	Spatial Averaging; Types: „continuous“ or „discrete“
Marker functions	Highest peak, next peak right, next peak left, next higher peak, next lower peak	
	Information provided by Marker: frequency, level, service name according to the selected service table. Delta marker to measure difference in level and frequency of the same trace or to display the difference between two different traces e.g. average and maximum at the same frequency.	
Evaluation functions	Peak table (list of up to 50 highest peaks) Integration over a user-specified frequency range (channel power)	
Axis	X, Y, Z axis selection for single-axis measurements using a Narda Three-Axis Antenna or selection of isotropic measurements	
Display functions	Y-scale range:	20, 40, 60, 80, 100 or 120 dB
	Y-scale reference:	MR-100 dB to MR+20 dB (-130 dBm to +40 dBm)
	Screen arrangement:	help line, status lines on/off
Zoom	Zoom Min:	Sets the lower frequency limit of the zoom window
	Zoom Max:	Sets the upper frequency limit of the zoom window
	Zoom Cent:	Moves the zoom window along the frequency axis
	Zoom Span:	Changes the scale of the zoom window
	Execute Zoom:	Sets the zoom window limits to the selected frequency values
Extras (transfer of parameters)	"Go to: mode" changes the operating mode with automatic parameter transfer for Fcent and Fspan.	
	"Select Service" allows easy frequency settings by means of predefined service tables	

MODE SAFETY EVALUATION	
Measurement principle	Spectrum analysis, followed by integration over user-defined frequency bands ("services")
Number of services	1 to 500, predefined by service tables on the instrument or created by PC software SRM-3006 Tools
Name of services	User definable, maximum 15 characters set by PC software SRM-3006 Tools
Channel bandwidth of a service (CBW)	Individually selectable for each channel, from 40 Hz to 6 GHz
Resolution bandwidth RBW, (-3 dB nominal)	Available bandwidths as for Spectrum Analysis mode. The following condition applies: $RBW \leq CBW_{(\text{narrowest service})} / 4$ Automatic: RBW setting depending on of the narrowest service Manual: can be set in the range of available RBWs Individual: separately defined for each individual service by PC software SRM-3006 Tools ("Others" needs to be switched off)
Detection	Root mean square value (RMS), integration time = 1 / RBW
Filter	See Spectrum Analysis mode
Result types	See Spectrum Analysis mode
Marker functions for bar graph view	Highest peak, next peak right, next peak left, next higher peak, next lower peak Information provided by Marker: frequency, level, service name according to the selected service table. Delta marker to measure difference in level and frequency of the same trace or to display the difference between two different traces (Result Types) at the same frequency.
Evaluation function	Distribution (percentage contribution of each service)
Axis	X, Y, Z axis selection for single-axis measurements using a Narda Three-Axis Antenna or selection of isotropic measurements
Display functions	Table view showing service names, the corresponding frequency bands, field strength per result type and RBW (when set to individual) Screen arrangement: help line, status lines on/off Sort function according to various criteria Bar graph of services showing contribution of the selected Result Types
Noise threshold	Displays results only if they are above the typical noise floor when activated. The threshold is selectable (0, 3, 6, 10, 15, or 20 dB relative to the typical DANL). Measurement values below the threshold are shown as the absolute threshold value marked with "<" (less than threshold)
Others On/Off	Others On: field strength in the frequency gaps between the specified services is measured Others Off: field strength in the frequency gaps between the specified services is ignored
Extras (transfer of parameters)	"Go to: mode" changes the operating mode with automatic parameter transfer for Fcent and Fspan. „Select Service Table“ allows switching between predefined service tables

MODE UMTS P-CPICH DEMODULATION (OPTION)		
Measurement principle	Demodulation of the P-CPICH (Primary Common Pilot Channel) as the basis for automatic assignment of measured field strength values to the individual UMTS radio cells	
UMTS channel selection	By entering the center frequency (Fcent)	
Frequency setting resolution	100 kHz (for Fcent frequency entry)	
Resolution bandwidth RBW, (-3 dB nominal)	3.84 MHz (fixed)	
Detection	Root mean square value (RMS), integration time = 10 ms	
Filter	Type	Root-raised cosine (RRC)
	Roll-off factor	$\alpha = 0.22$
Demodulation algorithms	P-CPICH decoding dynamic typically -20 dB according EN50492 / IEC 62232	
Result types	Individually selectable for:	
	Act:	Displays instantaneous (actual) channel power
	Max:	Maximum hold function
	Avg:	Average over a selectable number of measurements (4 to 256) or a selectable time period of 1 to 30 minutes
	Max Avg:	Maximum hold function after averaging
	Min:	Minimum hold function
	Min Avg:	Minimum hold function after averaging
Standard:	Display of the selected safety standard	
Evaluation functions	Extrapolation factor adjustable from 1 to 100 in steps of 0.001 Ratio Pilot/Analog in dB	
Axis	X, Y, Z axis selection for single-axis measurements using a Narda Three-Axis Antenna or selection of isotropic measurements	
Results display	Up to 16 scrambling codes simultaneously	
	Displayed items	Selection of individual scrambling codes
		Channel power for the selected Result Types
	Number of measurement runs since last reset	
	Table layout	Table format: Index, Scrambling Code, selected result types
Total: Total power of all listed scrambling codes		
Noise threshold	In case of "Analog" results: values are displayed only if they are above the typical noise floor when activated. The threshold is selectable (0, 3, 6, 10, 15, or 20 dB relative to the typical DANL). Measurement values below the threshold are shown as the absolute threshold value marked with "<" (less than threshold)	
Extras (transfer of parameters)	"Go to: mode" changes the operating mode with automatic parameter transfer for Fcent and RBW. "Select Service" allows easy frequency settings by means of predefined service tables	

MODE LTE (for FDD networks) (OPTION)																						
Measurement principle	Power level measurement of the cell specific and traffic independent signals PSS (Primary Sync Signal), SSS (Secondary Sync Signal) and RS (Reference Signal) of LTE cells.																					
LTE channel selection	By entering the center frequency (Fcent)																					
Frequency setting resolution	100 kHz (for Fcent frequency entry)																					
Channel bandwidth CBW, (-6 dB nom.)	Can be set to the following values:																					
	<table border="1"> <tr> <td>No. of subcarriers</td> <td>72</td> <td>180</td> <td>300</td> <td>600</td> <td>900</td> <td>1200</td> </tr> <tr> <td>TBW (MHz)</td> <td>1.08</td> <td>2.7</td> <td>4.5</td> <td>9.0</td> <td>13.5</td> <td>18</td> </tr> <tr> <td>CBW (MHz)</td> <td>1.4</td> <td>3</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> </tr> </table>	No. of subcarriers	72	180	300	600	900	1200	TBW (MHz)	1.08	2.7	4.5	9.0	13.5	18	CBW (MHz)	1.4	3	5	10	15	20
	No. of subcarriers	72	180	300	600	900	1200															
	TBW (MHz)	1.08	2.7	4.5	9.0	13.5	18															
CBW (MHz)	1.4	3	5	10	15	20																
Transmit Bandwidth (TBW) is the occupied bandwidth of all subcarriers																						
Detection	Root mean square value (RMS), integration time = 10 ms (5 ms at CBW 15 MHz, 20 MHz)																					
Filter	Type	Steep cut-off channel filter (app. Raised-Cosine)																				
	Roll-off factor	$\alpha = 1 - (TBW/CBW)$																				
Cell specific signals (Signal)	Individually selectable for: PSS (Primary Sync Signal) SSS (Secondary Sync Signal) RS Avg (Reference Signal Average) RS Sum (Reference Signal Sum) RS Max (Reference Signal Maximum) RS 0 (Reference Signal antenna 0) RS 1 (Reference Signal antenna 1) RS 2 (Reference Signal antenna 2) RS 3 (Reference Signal antenna 3)																					
(Display of the average power level per Resource Element out of all elements of the considered signal)																						
Result types	Individually selectable for: Act: Displays the instantaneous (actual) value Max: Maximum hold function Avg: Average over a selectable number of measurements (4 to 256) or a selectable time period of 1 to 30 minutes Max Avg: Maximum hold function after averaging Min: Minimum hold function Min Avg: Minimum hold function after averaging Standard: Display of the selected safety standard																					
(applicable to all cell specific signals)																						
Axis	X, Y, Z axis selection for single-axis measurements using a Narda Three-Axis Antenna or selection of isotropic measurements																					
Extrapolation function	Extrapolation factor adjustable from 1 to 10000 in steps of 0.001																					
Results display	Displayed items	Selection of individual Cell ID's Number of measurement runs since last reset																				
	Table layout	Up to 16 Cell ID's simultaneously Table format: Index, Cell ID, No. Ant. (number of antennas), selected signals shown for each selected result type (up to 54 columns + Standard)																				
		Total: Total power of all listed Cell ID's																				
		Analog: Analog measurement result for the selected LTE frequency channel (no extrapolation)																				
Setting parameters	Synchronization (Cell Sync): Sync/ No Sync Cyclic Prefix Length (CP Length): Normal/Extended																					
Noise threshold	In case of "Analog" results: values are displayed only if they are above the typical noise floor when activated. The threshold is selectable (0, 3, 6, 10, 15, or 20 dB relative to the typical DANL). Measurement values below the threshold are shown as the absolute threshold value marked with "<" (less than threshold)																					
Extras (transfer of parameters)	"Go to: mode" changes the operating mode with automatic parameter transfer for Fcent and CBW. "Select Service" allows easy frequency settings by means of predefined service tables																					

MODE LTE (for TDD networks) (OPTION)																						
Measurement principle	Power level measurement of the cell specific and traffic independent signals PSS (Primary Sync Signal), SSS (Secondary Sync Signal) and RS (Reference Signal) of LTE cells.																					
LTE channel selection	By entering the center frequency (Fcent)																					
Frequency setting resolution	100 kHz (for Fcent frequency entry)																					
Uplink-downlink configuration (3GPP TS 36.211)	Seven uplink-downlink (0-6) configurations according to the standard 3GPP TS 36.211 are supported. To obtain a reliable result the instrument should be adapted to the uplink-downlink configuration of the base station.																					
Channel bandwidth CBW, (-6 dB nom.)	Can be set to the following values:																					
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Transmit Bandwidth (TBW) is the occupied bandwidth of all subcarriers																						
Detection	Root mean square value (RMS), integration time = 10 ms (5 ms at CBW 15 MHz, 20 MHz)																					
Filter	Type	Steep cut-off channel filter (app. Raised-Cosine)																				
	Roll-off factor	$\alpha = 1 - (TBW/CBW)$																				
Cell specific signals (Signal) (Display of the average power level per Resource Element out of all elements of the considered signal)	Individually selectable for: PSS (Primary Sync Signal) SSS (Secondary Sync Signal) RS Avg (Reference Signal Average) RS Sum (Reference Signal Sum) RS Max (Reference Signal Maximum) RS 0 (Reference Signal antenna 0) RS 1 (Reference Signal antenna 1) RS 2 (Reference Signal antenna 2) RS 3 (Reference Signal antenna 3)																					
Result types (applicable to all cell specific signals)	Individually selectable for: Act: Displays the instantaneous (actual) value Max: Maximum hold function Avg: Average over a selectable number of measurements (4 to 256) or a selectable time period of 1 to 30 minutes Max Avg: Maximum hold function after averaging Min: Minimum hold function Min Avg: Minimum hold function after averaging Standard: Display of the selected safety standard																					
Axis	X, Y, Z axis selection for single-axis measurements using a Narda Three-Axis Antenna or selection of isotropic measurements																					
Extrapolation function	Extrapolation factor adjustable from 1 to 10000 in steps of 0.001																					
Results display	Displayed items	Selection of individual Cell ID's Number of measurement runs since last reset																				
	Table layout	Up to 16 Cell ID's simultaneously Table format: Index, Cell ID, No. Ant. (number of antennas), selected signals shown for each selected result type (up to 54 columns + Standard) Total: Total power of all listed Cell ID's Analog: Analog measurement result for the selected LTE frequency channel (no extrapolation)																				
Setting parameters	Synchronization (Cell Sync): Sync/ No Sync Cyclic Prefix Length (CP Length): Normal/Extended																					
Noise threshold	In case of "Analog" results: values are displayed only if they are above the typical noise floor when activated. The threshold is selectable (0, 3, 6, 10, 15, or 20 dB relative to the typical DANL). Measurement values below the threshold are shown as the absolute threshold value marked with "<" (less than threshold)																					
Extras (transfer of parameters)	"Go to: mode" changes the operating mode with automatic parameter transfer for Fcent and CBW. "Select Service" allows easy frequency settings by means of predefined service tables																					

LEVEL RECORDER MODE		
Measurement principle	Selective level measurement at a fixed frequency setting (Zero Span)	
Detection	Peak (holding time 480 ms) Root mean square value (RMS), RMS average time adjustable from 480 ms up to 30 min	
Filter	Type	Steep cut-off channel filter (app. raised cosine)
	Roll-off factor	$\alpha = 0.16$
Resolution bandwidth RBW (-6 dB nominal)	100 Hz to 32 MHz (in steps of 100, 125, 160, 200, 250, 320, 400, 500, 640, 800, 1000, ..., 10 MHz, 13.333 MHz, 16 MHz, 20 MHz, 26.666 MHz, 32 MHz)	
Video bandwidth (VBW)	Off, 0.01 Hz to 32 MHz (depending on the selected RBW)	
Result Type	Peak ACT: Displays the actual peak value Peak MAX: Max hold function for peak values RMS ACT: Averaging over a defined time period (0.48 seconds to 30 min) RMS MAX: Max hold function for RMS values SAVG: Spatial Averaging; Types: „continuous“ or „discrete“	
Axis	X, Y, Z axis selection for single-axis measurements using a Narda Three-Axis Antenna or selection of isotropic measurements	
Noise threshold	Displays results only if they are above the typical noise floor when activated. The threshold is selectable (0, 3, 6, 10, 15, or 20 dB relative to the typical DANL). Measurement values below the threshold are shown as the absolute threshold value marked with “<” (less than threshold). Only applies to the numerical result display (Value)	
Extras (transfer of parameters)	“Go to: mode” changes the operating mode with automatic parameter transfer for Fcent and RBW. “Select Service” allows easy frequency settings by means of predefined service tables	
SCOPE MODE (OPTION)		
Measurement principle	Selective level measurement at a fixed frequency setting (Zero Span)	
Filter	Type	Steep cut-off channel filter (app. raised cosine)
	Roll-off factor	$\alpha = 0.16$
Sweep Time	500 ns to 24 h (Time Span)	
Time Resolution	31.25 ns up to 90 min	
Resolution bandwidth RBW (-6 dB nominal)	100 Hz to 32 MHz (see Level Recorder Mode)	
Video bandwidth (VBW)	Off, 0.01 Hz to 32 MHz (depending on the selected RBW)	
Result Type	Magnitude Actual (high resolution)	ACT: Displays the instantaneous (actual) value. (time resolution = 1/RBW) Standard: Displays the limit of the selected safety standard
	Magnitude Condensed (long observation)	Magnitude Condensed allows to display the results over a long time period MAX: Maximum value within the time resolution interval (corresponds to peak detector). AVG: Average value within the time resolution interval (corresponds to RMS detector). MIN: Minimum value within the time resolution interval. Standard: Displays the limit of the selected safety standard.
Marker function	Delta marker, Marker, highest peak, next peak right, next peak left, next highest peak, next lowest peak	
Evaluation functions	Duty cycle (ratio of average power to maximum power)	
Triggering	Programmable Trigger Delay, Trigger Edge and Trigger Level	
Trigger Mode	Free Run	Time signal runs continuously.
	Single	Single triggering as soon as the selected conditions apply for Trigger Level, Trigger Delay, and Trigger Edge
	Multiple	Same as for Single but with multiple subsequent triggering
	Manual Start	Time signals displayed instant by a button.
	Time Controlled	Time signals runs instant by date and time.
Axis	X, Y, Z axis selection for single-axis measurements using a Narda Three-Axis Antenna or selection of isotropic measurements	
Extras (transfer of parameters)	“Go to: mode” changes the operating mode with automatic parameter transfer for Fcent and RBW. “Select Service” allows easy frequency settings by means of predefined service tables	

MEASUREMENT FUNCTIONS	
Detection of Narda measurement antennas	Automatic consideration of antenna parameters after antenna is plugged in: antenna type, serial number, calibration date and antenna factors (see below). Automatic frequency range adjustment according to the connected antenna
Antenna factors	Used to display measurement results in field strength units Stored in all Narda antennas during calibration Antenna factor lists for antennas from other manufacturers can be created and transferred to the instrument using the PC software SRM-3006 Tools/TS
Detection of Narda Cables	Automatic consideration of cable parameters after cable is plugged in: Cable type, serial number, calibration date and loss factors (see below) Automatic frequency range adjustment according to the connected cable
Cable loss factors	Used for frequency response compensation of the power level display Stored in all Narda cables during calibration Cable loss lists for cables from other manufacturers can be created and transferred to the instrument using the PC software SRM-3006 Tools/TS
Units	With antenna: % (of the standard), V/m, A/m, W/m ² , mW/cm ² , dBV/m, dBmV/m, dBA/m, dBμV/m, dBm, dBV, dBmV, dBμV Without antenna: dBm, dBV, dBmV, dBμV
Isotropic Measurements	Automatic switching of the antenna axes when using one of Narda's three-axis measurement antennas followed by computation of the isotropic result. Support for sequential measurements using single-axis antennas with subsequent computation of the isotropic result. Both results are directly displayed as a spectrum curve or as numerical values
Weighted Display	In % of standard for human safety standards like ICNIRP, IEEE, FCC etc. New lists of exposure limits can be created and transferred to the instrument using the PC software SRM-3006 Tools/TS
Correlation of results with telecom services	Service Tables specify the used frequency band, the name and the required resolution bandwidth (RBW) of up to 500 individual services in a single list. Thus measurement results can be easily assigned to a service even without the knowledge of the frequency (marker functions, peak table evaluation function, Safety Evaluation mode). Service Tables can be created either directly on the instrument or conveniently created and transferred to the instrument using the PC software SRM-3006 Tools/TS
Setups	Complete device configurations provide fast switching between different measurement tasks. Saved setups can be downloaded to a PC for archiving and uploaded back to the instrument using the PC software SRM-3006 Tools/TS
Measurement Routines	Automated sequences of setups (created using the PC software SRM-3006 Tools/TS)
Results Memory	Memory modes
	Conditional Storing
	Time Controlled Storing
	Memory capacity
Hold	Button that "Freezes" the display; the measurement continues in the background.
Operating language	Selectable: English (Default), French, Spanish, Turkish, Simplified Chinese

GENERAL SPECIFICATIONS		
Operating temperature range	-10 °C to +50 °C during normal operation with batteries 0 °C to +40 °C with external power supply	
Compliance	Climatic	
	Storage	1K3 (IEC 60721-3) extended to -10 °C to +50 °C
	Transport	2K4 (IEC 60721-3) restricted -30 °C to +70° C due to display
	Operating	7K2 (IEC 60721-3) extended to -10 °C to +50 °C
	Mechanical	
	Storage	1M3 (IEC 60721-3)
	Transport	2M3 (IEC 60721-3)
	Operating	7M3 (IEC 60721-3)
	Ingress protection	IP 52 (with antenna attached and interface protector closed)
	EMC	European Union
Immunity		EN: 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11
Emissions		EN: 61000-3-2, 61000-3-3, EN 55011 (CISPR 11) Class B
Safety	Complies with European Low Voltage Directive 2014/35/EU and EN 61010-1: 2010	
RF Immunity	200 V/m	
Air humidity (operating range)	< 29 g/m ³ (< 93 % RH at +30 °C), non-condensing	
Weight	2.8 kg / 6.2 lbs (basic unit including battery)	
Dimensions (H x W x D)	213 mm x 297 mm x 77 mm (8.4" x 11.7" x 3.0")	
Display	Type	Color display TFT-LCD with backlight, for indoor and outdoor use
	Size, resolution	7 inch (152 mm x 91 mm), 800 x 480 pixels
Interface		USB mini B (USB 2.0)
		Optical RS 232 (Baud rate 115 200)
		Earphone 3.5 mm TRS
Power supply	Battery	Lithium-Ion rechargeable battery pack operating time: 2.5 hours (nominal) charging time: 4.5 hours (nominal)
	External power supply	Input: 9 to 15 V _{DC} Adapter 100-240 V _{AC} / 12 V _{DC} , 2.5 A (plug DIN 45323)
Recommended calibration interval	24 months	
Country of origin	Germany	

SPECIFICATIONS ● ISOTROPIC ANTENNAS

Three-axis antenna (E-Field) 3501/03				
Frequency range	27 MHz to 3 GHz The correction factors determined individually during calibration are stored in an EEPROM and are applied automatically when used in conjunction with the SRM basic unit.			
Antenna type	E-field			
Sensor type	Three-axis design with scanned axes			
Dynamic range ^{a)}	0.2 mV/m to 200 V/m (typ.)			
Maximum field strength (destruction limit)	435 V/m or 50 mW/cm ² (nom.)			
Displayed Average Noise Level (DANL) in conjunction with the SRM basic unit	Frequency range	Single-axis measurement with isotropic antenna	Isotropic measurement	
	900 MHz (RBW = 1 kHz)	25 µV/m (typ.)	40 µV/m (typ.)	
	2.1 GHz (RBW = 1 kHz)	40 µV/m (typ.)	70 µV/m (typ.)	
Measurement range limit (for single CW signal)	300 V/m (typ.) 1000 V/m (typ.) for $f \leq 110$ MHz			
RF connector	N-Connector, 50 Ω, male			
MEASUREMENT UNCERTAINTY				
Expanded measurement uncertainty ^{b)} (in conjunction with SRM basic unit and 1.5 m RF cable)	Frequency range	Single-axis measurement with isotropic antenna	Isotropic measurement	
	27 – 85 MHz	+2.4 / -3.3 dB	+ 3.2 / -4.7 dB	
	> 85–900 MHz	+2.4 / -3.4 dB	+2.5 / -3.6 dB	
	> 900-1400 MHz	+2.3 / -3.1 dB	+2.5 / -3.4 dB	
	> 1400-1600 MHz	+2.3 / -3.1 dB	+2.6 / -3.8 dB	
	> 1600-1800 MHz	+1.8 / -2.3 dB	+2.2 / -3.0 dB	
	> 1800-2200 MHz	+1.8 / -2.3 dB	+2.4 / -3.3 dB	
	> 2200-2700 MHz	+1.9 / -2.4 dB	+2.7 / -3.8 dB	
> 2700-3000 MHz	+1.9 / -2.4 dB	+3.3 / -5.3 dB		
GENERAL SPECIFICATIONS				
Operating temperature range	-10 °C to +50 °C (same as SRM basic unit)			
Compliance	Climatic	Storage	1K3 (IEC 60721-3) extended to -10 °C to +50 °C	
		Transport	2K4 (IEC 60721-3) -40 °C to +70 °C	
		Operating	7K2 (IEC 60721-3) extended to -10 °C to +50 °C	
	Mechanical	Storage	1M3 (IEC 60721-3)	
		Transport	2M3 (IEC 60721-3)	
		Operating	7M3 (IEC 60721-3)	
	Ingress protection	IP 52 (antenna connected)		
	EMC	European Union	Complies with EMC Directive 2014/30/EU and EN 61326 -1: 2013	
		Immunity	EN: 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11	
		Emissions	EN: 61000-3-2, 61000-3-3, EN 55011 (CISPR 11) Class B	
Safety	Complies with European Low Voltage Directive 2014/35/EU and EN 61010-1: 2010			
Air humidity (operating range)	< 29 g/m ³ (< 93 % RH at +30 °C), non-condensing			
Weight	450 g			
Dimensions	450 mm length; 120 mm antenna head diameter			
Calibration	20 reference points: (26; 45; 75; 100; 200; 300; 433; 600; 750; 900) MHz (1; 1.2; 1.4; 1.6; 1.8; 2; 2.2; 2.45; 2.7; 3) GHz The SRM basic unit applies linear interpolation between reference points			
Recommended calibration interval	24 months			
Country of origin	Germany			

a) For a signal to noise ratio of 10 dB (RBW = 1 kHz); 800 MHz to 1.8 GHz

b) Valid for the temperature range +15 °C to +30 °C, according to the definition on page 3

Three-axis antenna (E-Field) 3502/01				
Frequency range	420 MHz to 6 GHz The correction factors determined individually during calibration are stored in an EEPROM and are applied automatically when used in conjunction with the SRM basic unit.			
Antenna type	E-field			
Sensor type	Three-axis design with scanned axes			
Dynamic range ^{a)}	0.14 mV/m to 160 V/m (typ.)			
Maximum field strength (destruction limit)	435 V/m or 50 mW/cm ² (nom.)			
Displayed Average Noise Level (DANL) in conjunction with the SRM basic unit	Frequency range	Single-axis measurement with isotropic antenna	Isotropic measurement	
	900 MHz (RBW = 1 kHz)	33 µV/m (typ.)	60 µV/m (typ.)	
	2.1 GHz (RBW = 1 kHz)	25 µV/m (typ.)	43 µV/m (typ.)	
Measurement range limit (for single CW signal)	200 V/m (typ.)			
RF connector	N-Connector, 50 Ω, male			
MEASUREMENT UNCERTAINTY				
Expanded measurement uncertainty ^{b)} (in conjunction with SRM basic unit and 1.5 m RF cable)	Frequency range	Single-axis measurement with isotropic antenna	Isotropic measurement	
	420-750 MHz	+2.1 / -2.9 dB	+2.6 / -3.8 dB	
	> 750-1800 MHz	+2.1 / -2.8 dB	+2.3 / -3.1 dB	
	> 1800-4000 MHz	+1.7 / -2.2 dB	+2.0 / -2.6 dB	
	> 4000-4500 MHz	+1.8 / -2.3 dB	+2.2 / -3.0 dB	
	> 4500-5000 MHz	+1.9 / -2.5 dB	+2.5 / -3.5 dB	
> 5000-6000 MHz	+1.9 / -2.5 dB	+3.1 / -4.9 dB		
GENERAL SPECIFICATIONS				
Operating temperature range	-10 °C to +50 °C (same as SRM basic unit)			
Compliance	Climatic	Storage	1K3 (IEC 60721-3) extended to -10 °C to +50 °C	
		Transport	2K4 (IEC 60721-3) -40 °C to +70 °C	
		Operating	7K2 (IEC 60721-3) extended to -10 °C to +50 °C	
	Mechanical	Storage	1M3 (IEC 60721-3)	
		Transport	2M3 (IEC 60721-3)	
		Operating	7M3 (IEC 60721-3)	
	Ingress protection	IP 52 (antenna connected)		
	EMC	European Union	Complies with EMC Directive 2014/30/EU and EN 61326 -1: 2013	
		Immunity	EN: 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11	
Emissions	EN: 61000-3-2, 61000-3-3, EN 55011 (CISPR 11) Class B			
Safety	Complies with European Low Voltage Directive 2014/35/EU and EN 61010-1: 2010			
Air humidity (operating range)	< 29 g/m ³ (< 93 % RH at +30 °C), non-condensing			
Weight	400 g			
Dimensions	450 mm length; 120 mm antenna head diameter			
Calibration	21 reference points: 420 MHz, 600 MHz, 750 MHz; 900 MHz (1; 1.2; 1.4; 1.6; 1.8; 2; 2.2; 2.45; 2.7; 3; 3.5; 4; 4.5; 5; 5.5; 5.8; 6) GHz The SRM basic unit applies linear interpolation between reference points.			
Recommended calibration interval	24 months			
Country of origin	Germany			

a) For a signal to noise ratio of 10 dB (RBW = 1 kHz); 1.8 to 2.2 GHz

b) Valid for the temperature range +15 °C to +30 °C, according to the definition on page 3

Three-axis antenna (H-Field) 3581/02				
Frequency range	9 kHz to 250 MHz The correction factors determined individually during calibration are stored in an EEPROM and are applied automatically when used in conjunction with the SRM basic unit.			
Antenna type	H-Field			
Sensor type	Triaxial active magnetic loop design with scanned axes			
Dynamic range ^{a)}	2.5 μ A/m to 560 mA/m (typ.)			
Maximum field strength (destruction limit)	250 A/m / f [MHz] (nom.)			
Displayed Average Noise Level (DANL) in conjunction with the SRM basic unit	Frequency range	Single-axis measurement with isotropic antenna	Isotropic measurement	
	> 1 MHz (RBW = 1 kHz)	0.5 μ A/m (typ.)	0.85 μ A/m (typ.)	
RF connector ^{c)}	N-Connector, 50 Ω , male			
Measurement uncertainty				
Expanded measurement uncertainty ^{b)} (in conjunction with SRM basic unit and 1.5 m RF cable)	Frequency range	Single-axis measurement with isotropic antenna	Isotropic measurement	
	0.009 - 60 MHz	± 2.2 dB	± 2.5 dB	
	> 60 - 250 MHz	± 2.3 dB	± 3.3 dB	
GENERAL SPECIFICATIONS				
Operating temperature range	-10 °C to +50 °C (same as SRM basic unit)			
Compliance	Climatic	Storage	1K3 (IEC 60721-3) extended to -10 °C to +50 °C	
		Transport	2K4 (IEC 60721-3) -40 °C to +70 °C	
		Operating	7K2 (IEC 60721-3) extended to -10 °C to +50 °C	
	Mechanical	Storage	1M3 (IEC 60721-3)	
		Transport	2M3 (IEC 60721-3)	
		Operating	7M3 (IEC 60721-3)	
	Ingress protection	IP 52 (antenna connected)		
	EMC	European Union	Complies with EMC Directive 2014/30/EU and EN 61326 -1: 2013	
		Immunity	EN: 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11	
		Emissions	EN: 61000-3-2, 61000-3-3, EN 55011 (CISPR 11) Class B	
Safety	Complies with European Low Voltage Directive 2014/35/EU and EN 61010-1: 2010			
Air humidity (operating range)	< 29 g/m ³ (< 93 % RH at +30 °C), non-condensing			
Weight	470 g			
Dimensions	450 mm length; 120 mm antenna head diameter			
Calibration	178 reference points The SRM basic unit applies linear interpolation between reference points.			
Recommended calibration interval	24 months			
Country of origin	Germany			

a) For a signal to noise ratio of 10 dB (RBW = 1 kHz); 3 MHz to 250 MHz

b) Valid for the temperature range +15 °C to +30 °C, according to the definition on page 3

SPECIFICATIONS ● SINGLE-AXIS ANTENNAS

Single-axis antenna (E-field) 3531 / 01				
Frequency range	27 MHz to 3 GHz The correction factors determined individually during calibration are stored in an EEPROM and are applied automatically when used in conjunction with the SRM basic unit.			
Antenna type	E-Field			
Sensor type	Single-axis passive wide band dipole			
Dynamic range ^{a)}	60 µV/m to 80 V/m (typ.)			
Maximum field strength (destruction limit)	> 300 V/m or 25 mW/cm ² (nom.)			
Displayed Average Noise Level (DANL) in conjunction with the SRM basic unit	20 µV/m (typ.) from 100 MHz to 2.2 GHz with RBW = 1 kHz			
Measurement range limit (for single CW signal)	160 V/m (typ.)			
RF connector	N-Connector, 50 Ω, male			
UNCERTAINTY				
Expanded measurement uncertainty ^{b)} (in conjunction with SRM basic unit and 1.5 m RF cable)	Frequency range	Single-axis measurement		
	26 - 300 MHz	±2.1 dB		
	> 300 - 433 MHz	±2.4 dB		
	> 433 - 1600 MHz	±2.2 dB		
	> 1600 - 3000 MHz	±1.9 dB		
GENERAL SPECIFICATIONS				
Operating temperature range	-10 °C to 50 °C (same as SRM basic unit)			
Compliance	Climatic	Storage	1K3 (IEC 60721-3) extended to -10 °C to +50 °C	
		Transport	2K4 (IEC 60721-3) -40 °C to +70 °C	
		Operating	7K2 (IEC 60721-3) extended to -10 °C to +50 °C	
	Mechanical	Storage	1M3 (IEC 60721-3)	
		Transport	2M3 (IEC 60721-3)	
		Operating	7M3 (IEC 60721-3)	
	Ingress protection	IP 52 (antenna connected)		
	EMC	European Union	Complies with EMC Directive 2014/30/EU and EN 61326 -1: 2013	
		Immunity	EN: 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11	
		Emissions	EN: 61000-3-2, 61000-3-3, EN 55011 (CISPR 11) Class B	
	Safety	Complies with European Low Voltage Directive 2014/35/EU and EN 61010-1: 2010		
	Air humidity (operating range)	< 29 g/m ³ (< 93 % RH at +30 °C), non-condensing		
Weight	450 g			
Dimensions	460 mm length; 135 mm x 90 mm antenna head dimensions			
Calibration	24 reference points (26, 30, 40, 50, 60, 75, 100, 200, 300, 433, 600, 750, 900) MHz (1, 1.2, 1.4, 1.6, 1.8, 2, 2.2, 2.45, 2.6, 2.8, 3) GHz The SRM applies linear interpolation between reference points.			
Recommended calibration interval	24 months			
Country of origin	Germany			

a) For a signal to noise ratio of 10 dB (RBW = 1 kHz); 100 MHz to 2.2 GHz

b) Valid for the temperature range +15 °C to +30 °C, according to the definition on page 3

Single-axis antenna (E-field) 3531/04				
Frequency range	9 kHz to 300 MHz The correction factors determined individually during calibration are stored in an EEPROM and are applied automatically when used in conjunction with the SRM basic unit.			
Antenna type	E-field			
Sensor type	Single-axis active broadband dipole			
Dynamic range ^{a)}	50 µV/m to 16 V/m (typ.) for 300 kHz to 10 MHz 50 µV/m to 36 V/m (typ.) for > 10 MHz to 300 MHz			
Maximum field strength (destruction limit)	> 1000 V/m (nom.)			
Displayed Average Noise Level (DANL) in conjunction with the SRM basic unit	20 µV/m (typ.) for each frequency > 1 MHz with RBW = 1 kHz			
Measurement range limit (for single CW signal)	50 V/m (typ.)			
RF connector	N-Connector, 50 Ω, male			
UNCERTAINTY				
Expanded measurement uncertainty ^{b)} (in conjunction with SRM basic unit and 1.5 m cable)	Frequency range	Single-axis measurement		
	0.009 - 300 MHz	±2.0 dB		
GENERAL SPECIFICATIONS				
Operating temperature range	-10 °C to 50 °C (same as SRM basic unit)			
Compliance	Climatic	Storage	1K3 (IEC 60721-3) extended to -10 °C to +50 °C	
		Transport	2K4 (IEC 60721-3) -40 °C to +70 °C	
		Operating	7K2 (IEC 60721-3) extended to -10 °C to +50 °C	
	Mechanical	Storage	1M3 (IEC 60721-3)	
		Transport	2M3 (IEC 60721-3)	
		Operating	7M3 (IEC 60721-3)	
	Ingress protection	IP 52 (antenna connected)		
	EMC	European Union	Complies with EMC Directive 2014/30/EU and EN 61326 -1: 2013	
		Immunity	EN: 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11	
		Emissions	EN: 61000-3-2, 61000-3-3, EN 55011 (CISPR 11) Class B	
Safety	Complies with European Low Voltage Directive 2014/35/EU and EN 61010-1: 2010			
Air humidity (operating range)	< 29 g/m ³ (< 93 % RH at +30 °C), non-condensing			
Weight	550 g			
Dimensions	460 mm length; 135 mm x 90 mm antenna head dimension			
Calibration	183 reference points The SRM applies linear interpolation between reference points.			
Recommended calibration interval	24 months			
Country of origin	Germany			

a) For a signal to noise ratio of 10 dB (RBW = 1 kHz)

b) Valid for the temperature range +15 °C to +30 °C, according to the definition on page 3

Single-axis antenna (H-field) 3551/02				
Frequency range	9 kHz to 300 MHz The correction factors determined individually during calibration are stored in an EEPROM and are applied automatically when used in conjunction with the SRM basic unit.			
Antenna type	H-field			
Sensor type	Single-axis active magnetic loop			
Dynamic range ^{a)}	0.4 µA/m to 71 mA/m (typ.)			
Maximum field strength (destruction limit)	> 2.65 A/m above 1 MHz (nom.)			
Displayed Average Noise Level (DANL) in conjunction with the SRM basic unit	0.12 µA/m (typ.) for each frequency > 10 MHz with RBW = 1 kHz			
Measurement range limit (for single CW signal)	100 mA/m (typ.)			
RF connector	N-Connector, 50 Ω, male			
UNCERTAINTY				
Expanded measurement uncertainty ^{b)} (in conjunction with SRM basic unit and 1.5 m cable)	Frequency range	Single-axis measurement		
	0.009 - 1 MHz	±2.0 dB		
	> 1 - 300 MHz	±1.8 dB		
GENERAL SPECIFICATION				
Operating temperature range	-10 °C to 50 °C (same as SRM basic unit)			
Compliance	Climatic	Storage	1K3 (IEC 60721-3) extended to -10 °C to +50 °C	
		Transport	2K4 (IEC 60721-3) -40 °C to +70 °C	
		Operating	7K2 (IEC 60721-3) extended to -10 °C to +50 °C	
	Mechanical	Storage	1M3 (IEC 60721-3)	
		Transport	2M3 (IEC 60721-3)	
		Operating	7M3 (IEC 60721-3)	
	Ingress protection	IP 52 (antenna connected)		
	EMC	European Union	Complies with EMC Directive 2014/30/EU and EN 61326 -1: 2013	
		Immunity	EN: 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11	
		Emissions	EN: 61000-3-2, 61000-3-3, EN 55011 (CISPR 11) Class B	
Safety	Complies with European Low Voltage Directive 2014/35/EU and EN 61010-1: 2010			
Air humidity (operating range)	< 29 g/m ³ (< 93 % RH at +30 °C), non-condensing			
Weight	450 g			
Dimensions	460 mm length; 43 mm x 100 mm antenna head dimension			
Calibration	183 reference points The SRM interpolates between reference points			
Recommended calibration interval	24 months			
Country of origin	Germany			

a) For a signal to noise ratio of 10 dB (RBW = 1 kHz); for frequencies > 10 MHz

b) Valid for the temperature range +15 °C to +30 °C, according to the definition on page 3

ORDERING INFORMATION • INSTRUMENT SETS

SRM – Set Overview	Part Number
SRM-3006, Selective Radiation Meter, Set 1, Basic Unit, no Antenna Set includes: <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - Hardcase for SRM, 3001/90.03 - Calibration Certificates: Basic Unit, RF-Cable 	Set with Hardcase 3006/101
SRM-3006, Selective Radiation Meter, Set 2, Basic Unit, no Antenna Set includes: <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - SRM Hardcase Trolley, 3006/90.01 - Calibration Certificates: Basic Unit, RF-Cable 	Set with Trolley 3006/202
SRM-3006, Selective Radiation Meter, Set 3, Basic Unit plus one Isotropic Antenna (420 MHz – 6 GHz) Set includes: <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - Antenna, Three-Axis, E-Field, 420 MHz-6GHz (3502/01) - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - Hardcase for SRM, 3001/90.03 - Calibration Certificates: Basic Unit, RF-Cable, Antenna 	Set with Hardcase 3006/103

<p>SRM-3006, Selective Radiation Meter, Set 4, Basic Unit plus one Isotropic Antenna (420 MHz – 6 GHz) Set includes:</p> <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - Antenna, Three-Axis, E-Field, 420 MHz-6GHz (3502/01) - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - SRM Hardcase Trolley, 3006/90.01 - Calibration Certificates: Basic Unit, RF-Cable, Antenna 	Set with Trolley 3006/204
<p>SRM-3006, Selective Radiation Meter, Set 5, Basic Unit plus two Isotropic Antennas Set includes:</p> <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - Antenna, Three-Axis, E-Field, 420 MHz-6GHz (3502/01) - Antenna, Three-Axis, E-Field, 27 MHz-3GHz (3501/03) - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - Hardcase for SRM, 3001/90.03 - Calibration Certificates: Basic Unit, RF-Cable, Antennas 	Set with Hardcase 3006/105
<p>SRM-3006, Selective Radiation Meter, Set 6, Basic Unit plus two Isotropic Antennas Set includes:</p> <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - Antenna, Three-Axis, E-Field, 420 MHz-6GHz (3502/01) - Antenna, Three-Axis, E-Field, 27 MHz-3GHz (3501/03) - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - SRM Hardcase Trolley, 3006/90.01 - Calibration Certificates: Basic Unit, RF-Cable, Antennas 	Set with Trolley 3006/206

<p>SRM-3006, Selective Radiation Meter, Set 7, Basic Unit plus one Isotropic Antenna (27 MHz – 3 GHz) Set includes:</p> <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - Antenna, Three-Axis, E-Field, 27 MHz-3GHz (3501/03) - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - Hardcase for SRM, 3001/90.03 - Calibration Certificates: Basic Unit, RF-Cable, Antenna 	<p>Set with Hardcase 3006/107</p>
<p>SRM-3006, Selective Radiation Meter, Set 8, Basic Unit plus one Isotropic Antenna (27 MHz – 3 GHz) Set includes:</p> <ul style="list-style-type: none"> - Selective Radiation Meter, Basic Unit, SRM-3006 - Antenna, Three-Axis, E-Field, 27 MHz-3GHz (3501/03) - RF-Cable SRM, 9kHz-6GHz, N 50 Ohm, 1.5m (3602/01) - Carrying Strap for SRM (Basic Unit) (3001/90.02) - Holding Strap for SRM-3006 Basic Unit (3001/90.12) - Operating Manual SRM-3006, English (3006/98.21) - Power Supply 12VDC, 100V-240VAC, all Plugs (2259/92.04) - Software, SRM-3006 Tools (3006/93.01) - Cable, USB 2.0, Master/Slave - A/B mini (2260/90.55) - Reference Book Measuring RF Electromagnetic Fields (3006/98.25) - Safety Instructions (3300/98.10) - SRM Hardcase Trolley, 3006/90.01 - Calibration Certificates: Basic Unit, RF-Cable, Antenna 	<p>Set with Trolley 3006/208</p>

ORDERING INFORMATION

Your local Narda representative will inform you of all possible options as well as the current ordering information and will be pleased to provide you with advice.

ANTENNAS	
Antenna, Three-Axis, E-Field, 27 MHz - 3 GHz	3501/03
Antenna, Three-Axis, E-Field, 420 MHz - 6 GHz	3502/01
Antenna, Three-Axis, H-Field, 9 kHz - 250 MHz	3581/02
Antenna, Single-Axis, E-Field, 27 MHz - 3 GHz	3531/01
Antenna, Single-Axis, E-Field, 9 kHz - 300 MHz	3531/04
Antenna, Single-Axis, H-Field, 9 kHz - 300 MHz	3551/02
OPTIONS	
Option, UMTS P-CPICH Demodulation	3701/04
Option, Scope	3701/05
Option, LTE (for FDD networks)	3701/06
Option, LTE (for TDD networks)	3701/07
SOFTWARE	
Software, SRM-3006 Tools, Configuration SW (included in all sets)	-
Software, SRM-3006 TS, PC Evaluation and Remote	3006/93.10
ACCESSORIES	
Antenna Holder for Uniaxial/Triaxial Antenna	3501/90.01
Antenna Holder for Triaxial Antenna	3501/90.02
RF-Cable, 9kHz-6GHz, 1.5m, N 50 Ohm (included in all sets)	3602/01
RF-Cable, 9 kHz – 6 GHz, N 50 ohm, 5m	3602/02
Tripod, Non-Conductive, 1.65 m with carrying bag	2244/90.31
Tripod Extension, 0.50m, Non-Conductive	2244/90.45
Battery Pack, Rechargeable, 7V2 / 6200 mAh (one is included in each SRM Basic Unit)	3001/90.15
Charger Set for Battery Pack, External	3001/90.07
Power Supply DC Vehicle Adapter	2260/90.56
SRM Hardcase Trolley (for up to three antennas), replaces 3001/90.05 and 3001/90.03	3006/90.01
Carrying Strap for Hardcase (included in all sets with hardcase 3001/90.03)	3001/90.04
Protective Soft Carrying Bag for SRM-3006 Basic Unit	3001/90.13
N-Connector Saver for SRM	3001/90.14
O/E Converter USB, RP-02/USB	2260/90.07
Cable, FO Duplex, F-SMA to RP-02, 0.3m	2260/91.01
Cable, FO Duplex, RP-02, 2m	2260/91.02
Cable, FO Duplex, RP-02, 5m	2260/91.09
Cable, FO Duplex, RP-02, 10m	2260/91.07
Cable, FO Duplex, RP-02, 20m	2260/91.03
Cable, FO Duplex, RP-02, 50m	2260/91.04
Earphone, 3.5mm Plug	2400/90.03
Reference Book Measuring RF Electromagnetic Fields (included in all sets)	3006/98.25
Operating Manual SRM-3006, German (select for free instead of English)	3006/98.01

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