



*Rugged and Lightweight  
Housing designed for easy  
one-hand operation.  
Interchangeable plug-and-play  
probes, no need for configuration.*

## NBM-520 Broadband Field Meter

- ◆ Available with Isotropic Probes to cover 100 kHz to 60 GHz
- ◆ Plug-and-Play Probe Interface with Automatic Probe Parameter Detection
- ◆ Fully Automatic Zeroing
- ◆ Extra Small and Lightweight
- ◆ Easy 4 Button Operation
- ◆ Remote Operation via Optical Link
- ◆ Interoperability with NBM-550 (Controller)

### Description

The NBM-500 Series is the most accurate non-ionizing radiation survey system available. It provides the broadest frequency coverage of electric and magnetic fields. Both flat response probes and probes shaped to international standards are available. All NBM probes have a non-volatile memory containing device parameters and calibration data. Probes are calibrated independently of the meter. Any NBM probe can be used with any NBM-500 Series meter and still maintain total calibration.

### Applications

Precision measurement of electric and magnetic field strength for personal safety at work where high radiation levels are present, such as:

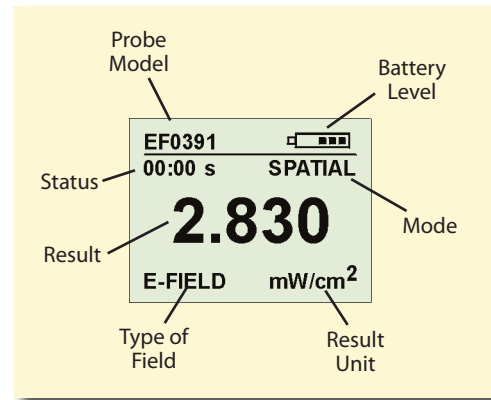
- General RF Safety program measurements
- Service work on transmitting and radar equipment
- Service work on mobile antennas, broadcasting and satellite communication systems
- Working with heating and hardening machines in the industry
- Operating diathermy equipment and other medical instruments producing short-wave radiation
- Drying equipment in the tanning and timber industries



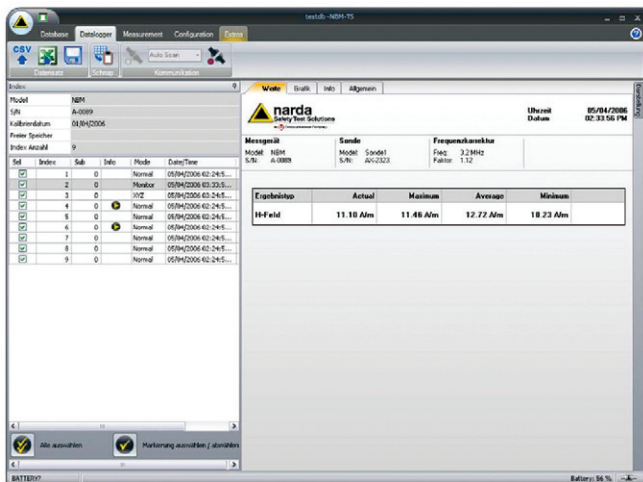
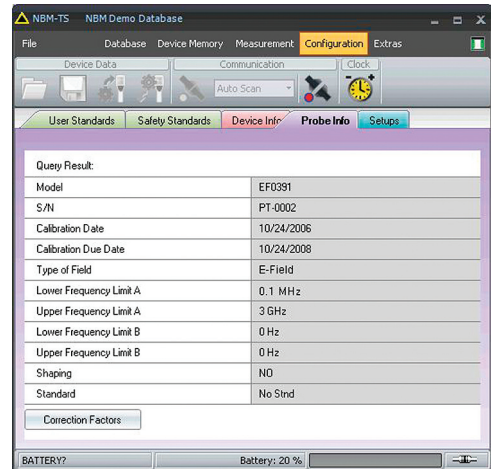
## NBM-520 Broadband Field Meter

### Features

- Easiest 4 button operation
- Automatic probe type recognition
- Intelligent probes (automatic probe data transfer)
- Audible alarm function (threshold adjustable by PC software)
- Auto-Zeroing (time interval adjustable by PC software)
- Time Averaging (time adjustable by PC software)
- Spatial Averaging (discrete samples or continuously)
- Maximum Hold display function
- Calibration Due Date check by PC software
- LCD Backlight (adjustable illumination time by PC software)
- Auto Power-Off (adjustable time by PC software)
- Selectable unit (V/m, A/m, mW/cm<sup>2</sup> or W/m<sup>2</sup>, % for shaped probes)
- Hold key to freeze the current display
- Optical link to connect to a PC
- Remote control via optical link
- Interoperability with NBM-550 (NBM-550 controls NBM-520)
- PC software included for instrument setup and remote testing



NBM-520 LCD Display Description



### PC Software

The NBM-TS transfer software is used for:

- changing instrument settings
- controlling firmware updates
- performing remote controlled measurements



### Specifications

NBM-520	
<b>DISPLAY</b>	
Display type	Transflective LCD, monochrome
Display Size	3.8 cm (1.5"), 128 x 64 dots
Backlight	White LEDs, selectable illumination time (OFF, 5s, 10s, 30s, 60s, PERMANENT)
Refresh Rate	400 ms
<b>MEASUREMENT FUNCTIONS</b>	
Result Units	mW/cm <sup>2</sup> , W/m <sup>2</sup> , V/m, A/m, % of Standard ("%" for shaped probes only)
Display Range	0.0001% to 9999% for all units (4 digits)
Result Types (isotropic, RSS)	Actual (ACT), Maximum (MAX), Average (AVG), Spatial Average (SPATIAL)
Averaging Time	4 seconds to 30 minutes (2 second steps), selectable by PC software
Spatial Averaging	discrete or continuously, selectable by PC software
Alarm Function	2 kHz audible signal (4 Hz repetition), threshold adjustable by PC software
<b>INTERFACES</b>	
Optical Interface	Used for remote operation and instrument configuration, Serial, full duplex, 115 kBaud, no parity, 1 start and 1 stop bit
Probe Interface	Plug-and-play auto detection, compatible with all NBM series probes
<b>GENERAL SPECIFICATIONS</b>	
Recommended Calibration Interval	24 months
Battery	NiMH rechargeable batteries, 2 x AA size (Mignon), 2500 mAh
Operation Time	22 hours (backlight off) 16 hours (permanent backlight)
Charging Time	2.0 hours
Battery Level Display	100%, 80%, 60%, 40%, 20%, 10%, low level (< 5%)
Humidity	5 to 95%, non condensing ≤29 g/m <sup>3</sup> absolute humidity (IEC 60721-3-2 class 7K2)
Temperature Range Operating Non-Operating (Transport)	-10° C to +50° C -30° C to +70° C
Humidity	5 to 95%, non condensing ≤29 g/m <sup>3</sup> absolute humidity (IEC 60721-3-2 class 7K2)
Size (h x w x d)	1.5 x 2.0 x 7.7 inches (38 x 52 x 195 mm) without probe
Weight	10.6 oz. (300 g) without probe
Accessories (included)	NBM-TS PC Transfer Software, rechargeable batteries, power supply, shoulder strap, O/E converter RS-232, fiber optic cable 2m, manual, certificate of calibration, transit case

**\*NOTE:** Narda strongly recommends that an optional check source be used to verify operation of the NBM Series. Any device capable of generating an upscale indication at microwave frequencies is acceptable, as well as Narda P/N 8699.





## NBM-520 Broadband Field Meter

### Ordering Information

NBM-520	Part Number
NBM-520 Narda Broadband Field Meter System Includes: NBM-520 Basic Unit (2403/01) Transit Case, Holds Meter and up to 2 Probes (2400/90.07) Power Supply / Charger 100 to 240 VAC Input, 9VDC Output (2259/92.06) 2 NiMH "AA" Rechargeable Batteries Shoulder Strap, 1m (2244/90.49) Cable, Fiber Optic Duplex (1000 μm) RP-02, 2m (2260/91.02) Fiber Optic to USB Converter (RP-02/USB) (2260/90.07) Software, NBM-TS, PC Transfer Software (2400/93.01) Operating Manual, NBM-520 Certificate of Calibration	2400/102
<b>Probes are NOT included</b>	
<b>PROBES</b>	
Probe EF 0391, E-Field, 100 kHz – 3 GHz, Isotropic	2402/01
Probe EF 0392, E-Field, 100 kHz – 3 GHz, Isotropic	2402/12
Probe EF 0691, E-Field, 100 kHz – 6 GHz, Isotropic	2402/14
Probe EF 1891, E-Field, 3 MHz – 18 GHz, Isotropic	2402/02
Probe EF 5091, E-Field, Thermocouple, 300 MHz – 50 GHz, Isotropic	2402/03
Probe EF 5092, E-Field, Thermocouple, 300 MHz – 50 GHz, Isotropic	2402/11
Probe EF 6091, E-Field, 100 MHz – 60 GHz, Isotropic	2402/04
Probe HF 3061, H-Field, 300 kHz - 30 MHz, Isotropic	2402/05
Probe HF 0191, H-Field, 27 MHz – 1 GHz, Isotropic	2402/06
Probe EA 5091, Shaped E-Field, FCC, 300 kHz - 50 GHz, Isotropic	2402/07
Probe EB 5091, Shaped E-Field, IEEE, 3 MHz - 50 GHz, Isotropic	2402/08
Probe EC 5091, Shaped E-Field, SC6, 300 kHz - 50 GHz, Isotropic	2402/09
Probe ED 5091, Shaped E-Field, ICNIRP, 300 kHz - 50 GHz, Isotropic	2402/10
<b>ACCESSORIES</b>	
Test-Generator 27 MHz, Hand-Held	2244/90.38
Tripod, Non-Conductive, 1.65m with Carrying Bag	2244/90.31
Tripod Extension, 0.50m, Non-Conductive (For 2244/90.31)	2244/90.45
Handle, Non-Conductive Extension 0.42m	2250/92.02
Cable, Fiber Optic Duplex (1000um) RP-02, 20m	2260/91.03
Cable, Fiber Optic Duplex (1000um) FSMA/ RP-02, 0.3m	2260/91.01
O/E Converter USB (RP-02/USB)	2260/90.07
Cable, Adapter, USB 2.0 - RS-232, 0.8 m	2260/90.53

