



*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:

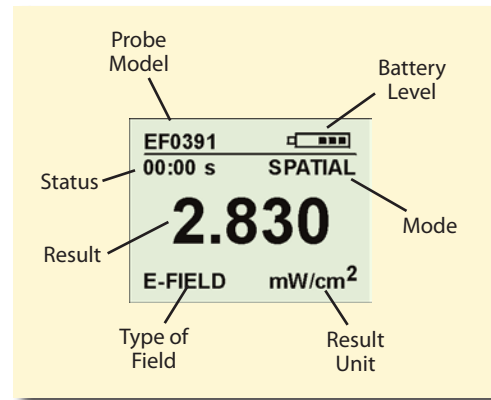
- General RF Safety program measurements
- Service work on transmitting and radar equipment
- Service work on mobile antennas, broadcasting and satellite communication systems
- Working with heating and hardening machines in the industry
- Operating diathermy equipment and other medical instruments producing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



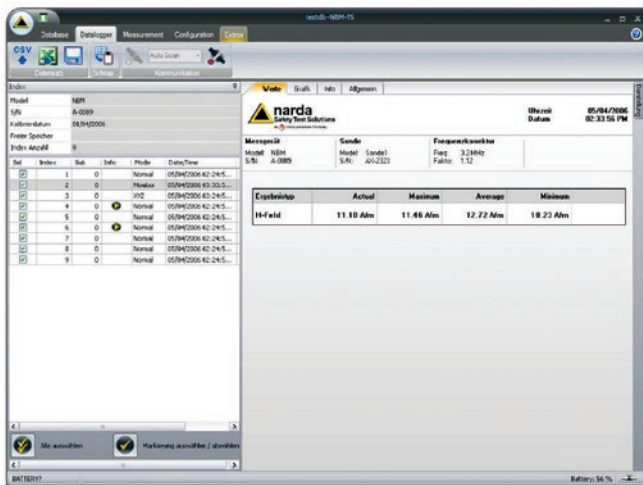
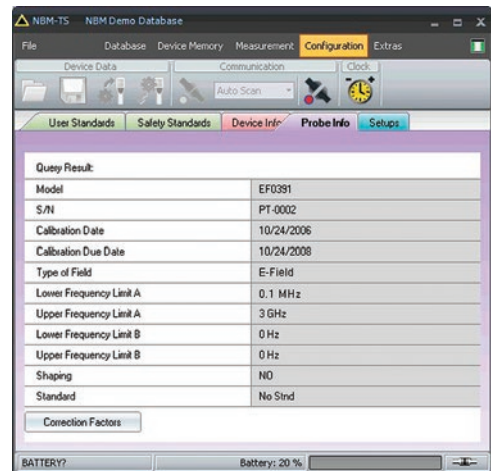
NBM-520 Broadband Field Meter

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/cm² or W/m², % 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 | |
|---|---|
| DISPLAY | |
| 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 |
| MEASUREMENT FUNCTIONS | |
| Result Units | mW/cm ² , W/m ² , 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 |
| INTERFACES | |
| 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 |
| GENERAL SPECIFICATIONS | |
| 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 ³ 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 ³ absolute humidity (IEC 60721-3-2 class 7K2) |
| Size (h x w x d) | 1.5 x 2.0 x 8 inches (38 x 52 x 203 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.





NBM-520 Broadband Field Meter

Ordering Information

| NBM-520 | Part Number |
|---|-------------|
| NBM-520 Narda Broadband Field Meter System Includes: NBM-520 Basic Unit (2403/01B) 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 | 2400/102B |
| Probes are NOT included | |
| PROBES | |
| Probe EF 0391, E-Field, 100 kHz – 3 GHz, Isotropic | 2402/01B |
| Probe EF 0392, E-Field, 100 kHz – 3 GHz, Isotropic | 2402/12B |
| Probe EF 0691, E-Field, 100 kHz – 6 GHz, Isotropic | 2402/14B |
| Probe EF 1891, E-Field, 3 MHz – 18 GHz, Isotropic | 2402/02B |
| Probe EF 5091, E-Field, Thermocouple, 300 MHz – 50 GHz, Isotropic | 2402/03B |
| Probe EF 5092, E-Field, Thermocouple, 300 MHz – 50 GHz, Isotropic | 2402/11B |
| Probe EF 6091, E-Field, 100 MHz – 60 GHz, Isotropic | 2402/04B |
| Probe HF 3061, H-Field, 300 kHz - 30 MHz, Isotropic | 2402/05B |
| Probe HF 0191, H-Field, 27 MHz – 1 GHz, Isotropic | 2402/06B |
| Probe EA 5091, Shaped E-Field, FCC, 300 kHz - 50 GHz, Isotropic | 2402/07B |
| Probe EB 5091, Shaped E-Field, IEEE, 3 MHz - 50 GHz, Isotropic | 2402/08B |
| Probe EC 5091, Shaped E-Field, SC6, 300 kHz - 50 GHz, Isotropic | 2402/09B |
| Probe ED 5091, Shaped E-Field, ICNIRP, 300 kHz - 50 GHz, Isotropic | 2402/10B |
| ACCESSORIES | |
| 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 |

