FM7004A
Field Monitor

- M1–M4

Features

The AR RF/Microwave Instrumentation Model FM7004A is a versatile electric and magnetic field monitoring system which performs all measurement display and control functions for field related testing. The FM7004A accepts inputs from up to 4 isotropic Field Probes which are all sold separately to match the test application.

The FM7004A field monitor provides four digital interfaces (IEEE-488, USB, RS-232, and Ethernet) and a highly readable, user configurable, LCD touch display. The monitor is menu driven and can be controlled from the front panel or remotely through any of the interfaces. The FM7004A displays up to four probe readings simultaneously. Readings from each axis, plus the composite reading, are displayed simultaneously. The FM7004A recognizes each attached probe and automatically displays the proper decimal places and units. Any faults that occur are logged and the unit is programmed to be self correcting when possible. As a software-

driven instrument, firmware upgrades can be made through the USB port.

The isotropic field probes have an integral optical transceiver which communicates with the field monitor through a twin fiber optic cable. The operator can select minimum, maximum or average reading from any or all selected probes thus enjoying complete flexibility in choice of signal input. Minimum and maximum hold capability has also been incorporated with local or remote controlled start and stop.

The FM7004A has the ability to correct probe readings over frequency using a set of correction factors stored in its internal memory. The FM7004A allows for up to six tables of field probe correction factors to be stored. Each table of correction factors can contain up to 30 different frequency points. The tables are loaded on the FM7004A using the USB port and the Table Loader program.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

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Single Probe X,Y,Z Display

Multi-probe X,Y,Z Display

Min/Max/Average Display

Min/Max Hold Display

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Specifications

INPUTS: Up to 4 independent probes, through 4 F/O FSMA pairs

OUTPUT:
Graphical, color LCD touch display
IEEE-488 (GPIB)
USB 2.0 (test and measurement class)
RS-232
Ethernet

COMPATIBLE FIELD PROBES: All 7000 and 8000 Series field probes.

POWER REQUIREMENTS:
Input voltage   Universal input 90 - 260 VAC, 50-60 Hz
Input current   0.2 - 0.6 Amps
Input type   IEC C14 Inlet with filter
Fuse   1A, 5x20 mm slow blow

OPERATING TEMPERATURE RANGE:
10°–40°C (50°–104° F) @ 5 - 95% RH non-condensing

ENCLOSURE: Desktop case, 2U high

CORRECTION FACTOR TABLES:
Stores up to 6 different tables (each table corresponding to one probe); 2 to 30 frequency points per table

WEIGHT:
without enclosure   2.3 kg (5 lb)
with enclosure   6.7 kg (14.75 lb)

SIZE (W x H x D):
without enclosure   48.3 x 9.0 x 25.4 cm
                     (9 x 3.5 x 10 in)
with enclosure   49.8 x 12.7 x 30.5 cm
                     (19.6 x 5.0 x 12.0 in)

EXPORT CLASSIFICATION: EAR99

Model Configurations

MODEL	DESCRIPTION
FM7004A	Housed in a 2U instrument case
FM7004AM1	Rack mount (instrument case removed)
FM7004AM2	Housed in a 3U instrument case to allow for one FI8000 to be installed
FM7004AM3	Housed in a 4U instrument case to allow for two FI8000's to be installed
FM7004AM4	Housed in a 6U instrument case to allow for four FI8000's to be installed

To order AR Products, call 215.723.8181. For an applications engineer call:800.933.8181. Direct to Service call: 215.723.0275 or email: service@arworld.us For Faxing Orders:866.859.0582 (Orders Only Please) info@arworld.us
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