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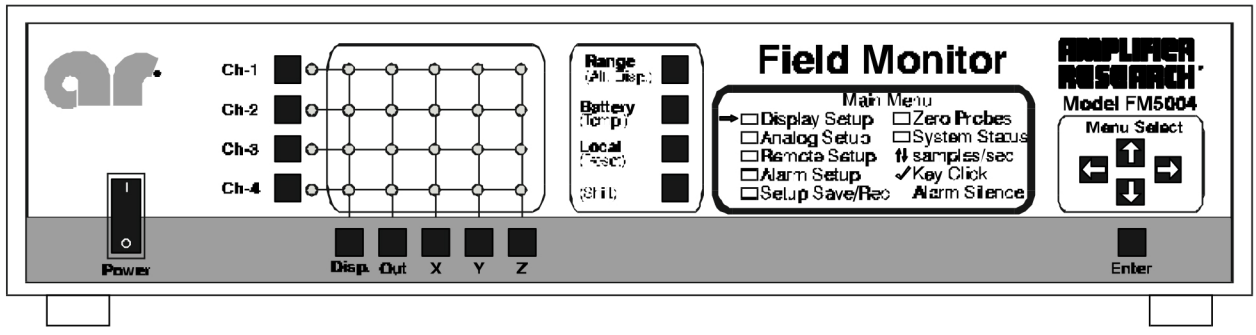
MODEL FM5004 Field Monitor
0.15 - 3000 V/m
15.0 mA/m - 30 A/m Sensitivity

The Amplifier Research Model FM5004 is a versatile electric and magnetic field monitoring system which performs all measurement display, control and alarm functions for field related testing. The FM5004 accepts inputs from up to 4 isotropic Field Probes (FPs) which are all sold separately to match the test application.

The FM5004 field monitor provides two digital interfaces (IEEE-488 and RS-232); a switch-selectable 0-5 VDC analog output; audible user selected field strength, temperature and low battery alarms; a highly readable, user configurable Liquid Crystal Display - all menu driven and controlled from the front panel. The FM5004 displays up to four probe readings simultaneously, in any combination of the five "E" field or two "H" field probes currently available or shows readings from each axis of a three axis probe*, plus the composite reading, simultaneously. The FM5004 recognizes each FP5000 series probe (or FP2000 series probes) and automatically displays the proper decimal places and units. It is backward compatible with all glass cabled probes. Menu selection allows the user to configure and store up to four measurement set-ups and the user can choose individual ranges or implement the autoranging function. Any faults that occur will be spelled out on the screen and the unit is programmed to be self correcting when possible. As a software driven instrument, field monitor software upgrades can be made through the RS-232 port.

The seven small isotropic field probes, have an integral battery powered transceiver which communicates with the field monitor through a twin fiber optic cable. The operator can select high, low or average reading from any or all selected probes thus enjoying complete flexibility in choice of signal input and automated leveling for EMC testing. The FM5004 is CE approved.

* all probes except the FP5080 (or FP2080) are three axis probes.



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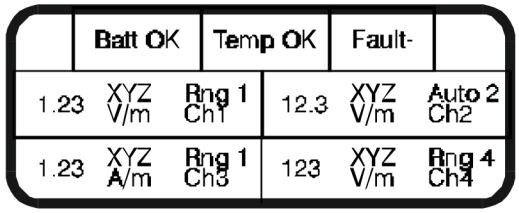
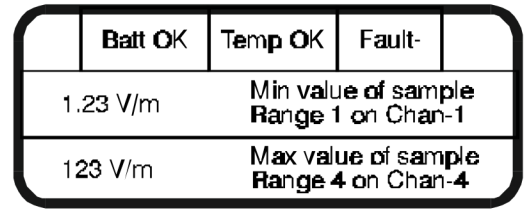
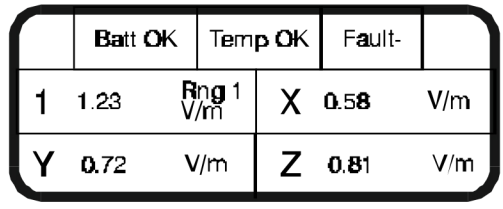
OUTPUT DISPLAY MODES



4 Probe Display



2 Line Display



3 Axis Display

SPECIFICATIONS
MODEL FM5004 SYSTEM

Sensitivity ..... *0.15 - 3000 V/m*
15.0 mA/m - 30 A/m

Frequency response ..... *10 kHz - 40 GHz (probe dependent)*

Inputs ..... *Up to 4 independent probes*

Overload withstand ..... *Probe dependent*

Output ..... *LCD digital display, resolution 0.1*
IEEE-488 interface
RS-232 interface
Analog (BNC): 0 - 5 VDC(10 mA max) proportional to % of selected range;
Alarm - audible signal

Power requirements
Input voltage ..... *Universal input 90 - 260 VAC, 47-63 Hz*
Input current ..... *0.8 - 0.4 Amps*
Input type ..... *IEC Inlet with filter*
Fuse ..... *1A, 5x20 mm slow blow*

Operating temperature range ..... *10 - 40° C (50 - 104° F) @ 5 - 95% RH non-condensing*

Weight (without case) ..... *3.2 kg (7 lb)*
(with case) *7.6 kg (16.75 lb)*

Size (WxHxD) (without case) ..... *48.3 x 9.0 x 26.9 cm*
19 x 3.5 x 10.1 in
(with case) ..... *49.8 x 12.7 x 30.5 cm*
19.6 x 5.0 x 12.0 in