

# TM 500 Series

# **Power Module Mainframes**

TM 500 plug-ins can operate in several different mainframes, including benchtop, portable, and rackmount configurations in the TM 500-Series and in the TM 5000-Series. This allows hundreds of different instrumentation packages to be configured for specific tasks.

#### Benchtop

Six benchtop mainframes are available in the TM 500-Series. The TM 501 is the most compact, accommodating a single-width TM 500 module. Others in the series include the TM 502A, TM 503A, TM 504, and new TM 506A. The TM 504 and TM 506A both include a high-power compartment at the right side for higher current levels. The "A" version mainframes feature a convenient switch for changing from a 110 V ac to 220 V ac source, and the TM 506A incorporates a quiet fan for maximum cooling. all bench-top moduls have feet, tilt-bails, and handles, and operate from 110 to 220 V ac.

#### **Portability**

Most benchtop models have optional protective front covers to further enhance portable applications. The TM 515 Traveler Mainframe is designed for even greater multi-instrument portability. The TM 515 is moisture and dust resistant, and will withstand the rigors of transport.

## Rackmount

The TM 506A is designed for rackmounting with Option 10. This option includes a slide assembly and handles, plus a higher powered fan than the bench version to accommodate the higher ambient temperatures often found in enclosed racks and consoles. The TM 506A will accommodate all hardware options that apply to the TM 5006.

### Mainframe Rear Interface

Both the TM 5000 and the TM 500 Mainframes offer the unique ability to have separate modular instruments interconnected through the internal rear interface board of each mainframe. For example, the rear trigger output of a signal source can be interconnected to speed precise voltage set-ups. Any module can be internally connected through the mainframe and externally interfaced at the rear panel.

Most modules have additional signal or control lines at the back of the instrument and can be connected via the rear interface board to an option 02 mainframe rear panel BNC's or a multipin "D" connector. The TM 515 mainframe is available with an Option 05 interface that includes everything in the Option 02 except for the rear-panel male connector, mating cable "D" connector, and BNC connectors.

A Rear Interface Data Book, and low-cost "Do it yourself Rear-Interface Modification Kits are available (see Optional Accessories below).

# **CHARACTERISTICS**

#### ENVIRONMENTAL

Temperature Range—Operating: 0 to +50 °C. Nonoperating: -55 to +75 °C. Altitude Range—Operating: Sea level to 4600 m (15,000 ft). Nonoperating: Sea level to 15000 m (50,000 ft).

#### **POWER REQUIREMENTS**

The mainframes have selectable taps on the power transformer that permit operation on 100, 110, 120, 200, 220, or 240 V  $\pm$ 10%. Power-Line Frequency Range—TM 501: 48 to 440 Hz. TM 502A/TM 503A: 48 to 400 Hz. TM504/TM 506/RTM 506/TM 515: 48 to 66 Hz. TM 515 (Purchased with Option 06): Extends upper power-line frequency range to 440 Hz.

# **ORDERING INFORMATION**

TM 5003 Power Module Mainframe Includes: Instruction manual (070-2955-00). TM 5006 Power Module Mainframe \$995 Includes: Instruction manual (070-2950-00). TM 501 Power Module Mainframe \$500 Includes: Instruction manual (070-1304-01). TM 502A \$250 Includes: Instruction manual (070-6502-00) TM 503A Power Module Mainframe \$325 Includes: Instruction manual (070-6568-00). TM 504 Power Module Mainframe \$590 Includes: Instruction manual (070-1716-01). TM 506 Power Module Mainframe \$820 Includes: Instruction manual (070-1786-02). TM 506A Power Module Mainframe Includes: Instruction manual. RTM 506 Rackmount Power Module

Mainframe \$900
Includes: Instruction manual (070-1786-02).
TM 515 Power Module Mainframe \$760
Includes: Instruction manual (070-2020-02).

## OPTIONS

| Option 02—Rear Interface             |         |
|--------------------------------------|---------|
| (TM 5003)                            | + \$100 |
| (TM 5006)                            | + \$190 |
| (TM 503A)                            | + \$75  |
| (TM 504)                             | + \$120 |
| (TM 506)                             | + \$180 |
| (TM 506A)                            | + \$150 |
| Option 05—(TM 515) Rear              |         |
| Interface                            | + \$90  |
| <b>Option 06</b> —(TN 515) 48 to 440 |         |
| Hz Fan.                              | + \$170 |
| Option 10—Rackmount                  |         |
| (TM 5006/TM 506A only)               | + \$100 |
|                                      |         |

| Option 11—(TM 502A/TM 503A)      |          |
|----------------------------------|----------|
| Deletes handle                   | - \$10   |
| Option 13—(TM 502A/TM503A)       |          |
| Toolbox                          | + \$75   |
| Option 12—Option 02 and 10       |          |
| Combined                         |          |
| (TM5006)                         | + \$290  |
| (TM506A)                         | + \$250  |
| INTERNATIONAL POWER PLUG O       | PTIONS   |
| Option A1—Universal Euro 220 V,  | 50 Hz.   |
| Option A2—UK 240 V, 50 Hz.       |          |
| Option A3-Australian 240 V, 50 H | Z.       |
| Option A4-North American 240 V   | , 60 Hz. |
| Option A5—Switzerland 220 V, 50  | Hz.      |
|                                  |          |

## **OPTIONAL ACCESSORIES**

| Rear Interface Data Book—        |      |
|----------------------------------|------|
| Order 070-2088-04                | \$18 |
| Rear Interface Modification Kit— |      |
| (Three wide) Order 020-1611-00   | \$75 |
| (No BNCs) Order 040-0846-01      | \$90 |
| CONVERSION KITS                  |      |
| Cabinet-to-Rackmount-Includes    |      |

Cabinet-to-Rackmount—Includes slide out assembly and fan (TM 5006, TM 506A) Order 040-0982-03. \$195 (TM 5003) Order 040-1257-00.\*1 (TM 5003 to 4041 Controller) Order 040-0984-01.\*1

Rackmount-to-Cabinet—Converts rackmount module to cabinet module.

(TM 5006, TM 506A) Order 040-0983-00.

\*1 Contact your local sales office.

# FLEXIBLE PLUG-IN EXTENDER CABLE

\$90

Designed to couple a TM 500 or TM 5000 Plugin with the mainframe rear-interface board connection extender, cables provide a completely flexible connecting point outside the mainframe for plug-in operation during test or check-out. See page 421.

# RECOMMENDED CARTS See Cart section.

| 206—Utility Cart          | \$250 |
|---------------------------|-------|
| K213—Lab Instrument Cart  | \$625 |
| K217—Rack Instrument Cart | \$510 |