

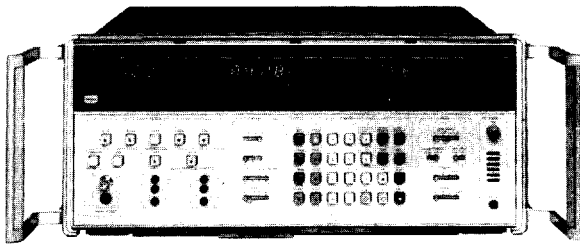
# TELECOMMUNICATIONS TEST EQUIPMENT

## Selective Level Measuring Set, Access/Distribution Switches

Models 3746A, 3754A, 3755A, 3756A, 3757A

### HP 3746A

- Fast, accurate measurements on frequency division multiplex (FDM) systems
- Selective filters for pilot, channel and (optionally) group power and weighted noise measurements
- Automatic tuning to stored frequency plans with comparison of measured level to stored limits



HP 3746A

### HP 3746A Selective Level Measuring Set (SLMS) (50 Hz to 32 MHz)

The HP 3746A SLMS makes fast, accurate selective level measurements. A built-in synthesiser gives high tuning accuracy and 1 Hz resolution across the entire 50 Hz to 32 MHz frequency range. Tuning can be performed by: entering a single frequency, stepping between frequency limits, stepping through a set of unrelated frequencies, or by FDM plan description.

The instrument's measurement filters are purpose designed for FDM testing. The flat-topped 3.1 kHz channel filter extracts a voice channel while rejecting adjacent carriers, pilots and other traffic. The 38 Hz pilot filter is flat topped over 22 Hz so AFC is not required, but rejects adjacent tones so that carrier leak can be tested on an active system. A built-in counter can be used to check tone frequencies. Options include: group power, C-message or psophometric noise measurements, noise-with-tone, phase jitter and single-level impulse noise.

The SLMS is optimised for FDM maintenance measurements and network monitoring. It has built-in "intelligence" to allow scanning of FDM signals and limit checking of measured levels. Special hot-tone search routines can rapidly detect high-level signals (See Application Note AN 323). The SLMS can directly control access switches for system applications, and has a built-in real-time clock and printer drivers for data logging. It is fully HP-IB programmable, and can be used as the heart of a self-contained measurement system, or integrated into a computer-controlled systems such as the HP 37050S FDM Network Monitoring System or HP 37051S Measurement System.

#### Ordering Information

	Price
HP 15580A Active Probe	\$490
HP 15581B Passive Probe	\$400
HP 15582A Return Loss Kit	\$710
HP 15589A Instrument Cart	\$830

#### HP 3746A Options

001: Siemens series 1.6/5.6 mm 75 ohm connectors	N/C
005: WECO 477B/223A (equivalent) connectors	\$70
011: 48 kHz group filter	\$1,150
012: tracking generator	\$360
014: high stability frequency reference	\$760
015: channel impairments - CCITT	\$520
016: channel impairments - North America	\$520

**HP 3746A Selective Level Measuring Set \$13,600**

### HP 3754A, 3755A, 3756A, 3757A

- Select 1 from a possible 10 RF inputs/outputs
- Cascade up to 111 switches to allow selection from 1000 inputs/outputs
- Mix different switches for the most cost-effective solution



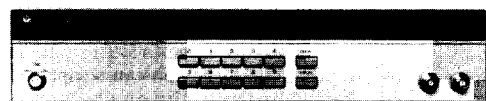
HP 3757A



HP 3754A



HP 3756A



HP 3755A

### HP 3754A, HP 3756A, HP 3757A Switches and HP 3755A Switch Controller

The HP 3754A, 3756A and 3757A Switches and the HP 3755A Switch Controller have been developed to meet the requirements of four main areas:

1. Frequency division multiplex (FDM) system surveillance and maintenance - the switch arrangement is used in conjunction with a selective level measuring set (SLMS), such as the HP 3746A, to monitor pilot and traffic levels at various points in the multiplex. The HP 3746A SLMS can control the access switches directly without needing the HP 3755A Switch Controller.
2. Production testing - where automatic selection or distribution of RF signals is required.
3. IF access and distribution - 70 MHz IF signals can be switched using the HP 3756A for connection to the HP 3717A 70 MHz Modulator/Demodulator.
4. Access and distribution of digital communications signals up to 34 Mb/s (CEPT) or 44.7 Mb/s (DS-3).

**Options:** The standard versions of these switches have BNC connectors and 75 ohm terminations. Different connectors are available as options on some models and 50 ohm versions are available as options or to special order on all models - see data sheet for full details.

#### Ordering Information

	Price
HP 3754A 25 MHz Access Switch	\$2,900
HP 3755A Switch Controller	\$2,800
HP 3756A 90 MHz Bi-directional Switch	\$3,600
HP 3757A 8.5 MHz Access Switch	\$1,150