Description
CalBench consoles can be fitted with various oscilloscopes depending on customer requirements. Each scope offers excellent accuracy and high performance, and are ideal for maintenance of electronic equipment and general purpose laboratory work.

Basic Specifications

**Modules** (standard range shown, Tektronix TDS 2000 series, others upon request)
- **7021:** Digital Oscilloscope Module - 70MHz, 2 channel, colour TFT LCD display.
- **7022:** Digital Oscilloscope Module - 70MHz, 4 channel, colour TFT LCD display.
- **7023:** Digital Oscilloscope Module - 100MHz, 4 channel, colour TFT LCD display.
- **7024:** Digital Oscilloscope Module - 200MHz, 4 channel, colour TFT LCD display.

**Display**
- TFT LCD.

**Bandwidth**
- 7021 & 7022 = 70 MHz. 7023 = 100 MHz. 7024 = 200 MHz. (B/w is 20 MHz at 2 mV/div for all).

**Channels**
- 7021 = 2. 7022, 7023, & 7024 = 4.

**External trigger input**
- Included on all modules.

**Sample rate on each channel**
- 7021 & 7022 = 1.0G S/s. 7023 & 7024 = 2.0 GS/s.

**Record length**
- 2.5 k points at all time bases on all modules.

**Vertical resolution**
- 8 bits.

**Vertical sensitivity**
- 2 mV to 5 V/div on all models with calibrated fine adjustment.

**DC Vertical accuracy**
- ±3 % on all modules.

**Vertical zoom**
- Vertically expand or compress a live or stopped waveform.

**Maximum input voltage**
- 300 V RMS CAT II; (derated at 20 dB/decade above 100 kHz to 13 V p-p AC at 3 MHz)

**Position range**
- 2 mV to 200 mV/div +2 V. >200 mV to 5 V/div +50 V.

**Bandwidth limit**
- 20 MHz for all modules.

**Input coupling**
- AC, DC, GND on all modules.

**Input impedance**
- 1 MΩ in parallel with 20 pF.

**Time base range**
- 7021 & 7022 = 5 ns to 50 s/div. 7023 & 7024 = 2.5 ns to 50 s/div.

**Time base accuracy**
- ±50 ppm.

**Horizontal zoom**
- Horizontally expand or compress a live or stopped waveform.

**Interfaces**
- USB host port on front panel supports USB flash drives.

**Module width**
- 425 mm (primary or secondary console fitting).

Features

- 16 automated measurements
- FFT analysis for simplified waveform analysis
- Built-in waveform limit testing
- Automated, extended data logging feature
- Autoset and signal auto-ranging
- Built-in context-sensitive help
- Probe check wizard
- Multiple-language user interface
- 5.7 in. (144 mm) active TFT colour display

Non-Volatile Storage

**Reference waveform display**
- (2) 2.5 k point reference waveforms.

**Waveform storage w/o USB Drive**
- 7021 = (2) 2.5 k point. 7022, 7023, & 7024 = (4) 2.5 k point.

**Maximum USB drive size**
- 64 GB.

**Waveform Storage with USB drive**
- 96+ reference waveforms per 8 MB.

**Setups without USB drive**
- 10 front-panel setups.

**Setups with USB drive**
- 4000 or more front-panel setups per 8 MB.

**Screen images with USB drive**
- 128 or more screen images per 8 MB.

**Save all with USB drive**
- 12 or more Save All operations per 8 MB.