

## PM 3308

Compact, portable DSO



GP16  
IEEE-488

- High-res 512 x 256 pixel electroluminescent display
- 40 MS/s sampling rate
- 100 MHz bandwidth
- Non-volatile 204 KB RAMdisk stores 99 traces or over 99 complete settings

The all-new PM 3308 revolutionizes DSO functionality with its compact dimensions and easy portability. The advanced electroluminescent screen is perfectly flat and parallax-free, and gives a clear, high-resolution display of waveforms and measurements with a contrast far superior to that of conventional CRTs. Despite its compact size, the PM 3308 makes no compromises on performance. Bandwidth is a full 100 MHz, with a maximum sampling rate of 40 MS/s on one channel at a long record length of 8 KB. The non-volatile 204 KB RAMdisk allows fast comparison of waveforms, and makes setting-up quick and precise by just recalling any of over 99 instrument settings.

### SPECIFICATION SUMMARY

#### DISPLAY:

**Type:** 191.9 x 95.9 mm rectangular electroluminescent display with 0.275 x 0.225 mm pixel size

#### SIGNAL ACQUISITION:

**Sampling modes:** real time 1  $\mu$ s/div...1 h/div

Equivalent time 10 ns/div...0.5  $\mu$ s/div

**Maximum sampling rate:** real time sampling, 40 MS/s in single-channel operation

**Vertical (voltage) resolution:** 8 bits or 0.4% of full range; 7 bits at 5 mV/div

**Horizontal (time) resolution** (single-channel acquisition): **MaxMem off:** 512 samples/acquisition; **MaxMem on:** 1  $\mu$ s/div...1 h/div at 8192 samples/acquisition

**Deflection coefficient:** 5 mV/div...5 V/div in a 1-2-5 sequence of 10 steps. Error limit overall  $\pm 1.5\%$

#### TIMEBASE:

**Modes:** recurrent, single shot, roll

**Dimensions:** 122x276x410 mm (HxWxD)

**Weight:** 6.5 kg

## PM 3365

Digital/analog 'Smart Scope'



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- 100 MHz analog bandwidth
- 100 Ms/s sampling on each channel
- 10 ns horizontal resolution
- AUTOSET
- Calculation functions

The PM 3365 offers powerful acquisition and measuring performance, plus easy operation with a built-in real-time analog mode and a 100 MHz bandwidth. The fast 100 MS/s sampling rate allows successful acquisition of high-frequency single-shots. The big extra benefit of sequential sampling allows high-resolution acquisition of repetitive signals up to 100 MHz. Other valuable acquisition capabilities are the extra-long post-trigger memory allows and the 'dual timebase referencing' mode, both of which provide valuable additional signal information. Extensive measurement and calculation functions make the PM 3365 ideal for detailed signal analysis, with instant on-screen display of the results.

### SPECIFICATION SUMMARY

**ANALOG MODE:** see PM 3065

#### DIGITAL MODE:

##### SIGNAL ACQUISITION:

**Maximum sampling rate:** 100 MS/s, dual channel

**Repetitive sampling:** **Vertical resolution:** 8 bits

**Horizontal display modes:** recurrent, single shot, multiple shot (up to 2), autozoom

**Timebase:** 0.5 s/div...20 ns/div (repetitive sampling - recurrent signals)

#### CURSORS:

##### Horizontal resolution:

**Single channel:** 1:4096 over 10 divisions; **Dual channel:** 1 x 2048, 2 ms/div...20 ns/div; 1:512 (1:1024 in dot join)

**MEMORY:** **Depth** 4096 words for acquisition as well as reference memory

## PM 3350

Digital/analog 'Smart Scope'



GP16  
IEEE-488

- 50 MHz analog bandwidth
- 100 Ms/s sampling on each channel
- 10 ns horizontal resolution
- AUTOSET
- Calculation functions

The PM 3350 is a full-specification DSO with the extra benefit of an analog real-time capability. The 100 MS/s sampling rate allows signals to be stored with excellent resolution. Also incorporated in this unit is a P2CCD (profiled peristaltic charge coupled device), which is a combination of a fast track-and-hold input circuit and an analog shift register. Additionally, signals can be stored in two large 4 K x 8-bit memories. The PM 3350 also has an analog/digital plot capability.

### SPECIFICATION SUMMARY

**ANALOG MODE:** see PM 3050

#### DIGITAL MODE:

##### SIGNAL ACQUISITION:

**Sampling:** 0.5  $\mu$ s/div...50 s/div; **Sampling rate:** 100 MS/s max on both channels; **Display expansion:** x1...x32 horizontal

#### TIMEBASE:

**Modes:** recurrent, single, multiple and roll; **Time coefficients:** 0.5  $\mu$ s/div...0.5 s/div (recurrent); 0.5  $\mu$ s/div...50 s/div (single and multiple)

#### TRIGGERING:

**Trigger delay:** -10...+250 div; **Auto setting:** available in analog mode

#### CURSORS:

**Horizontal resolution:** single-channel mode 1:4096, dual-channel mode: 1:2043

**Calculation functions:** peak-to-peak value, rise or fall time, frequency

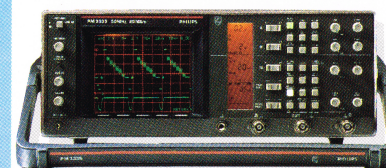
#### MEMORY:

**Registers:** 2: **Depth register:** 4096 words;

**Vertical resolution:** 8 bit

## PM 3335

Digital/analog 'Smart Scope'



GP16  
IEEE-488

- 50 MHz analog bandwidth
- 20 Ms/s sampling on each channel
- AUTOSET
- Large 8 K acquisition memory
- Versatile cursor measurement

The PM 3335 gives you excellent performance at an attractive price. Like all the Philips 'combi' models, the PM 3335 has both digital storage and real-time analog modes, both of them equally easy to use. This instrument's large 8 K memory, together with the 20 MS/s sampling rate, ensures high-resolution acquisition and storage for detailed signal information. In analog mode, signals with a bandwidth up to 50 MHz can be displayed. A unique feature in this price class are cursors, for accurate measurements and calculations on stored signals. All that's necessary is to place the cursors on the waveform, and read out the desired values.

### SPECIFICATION SUMMARY

**ANALOG MODE:** see PM 3050

#### DIGITAL MODE:

##### SIGNAL ACQUISITION:

**Maximum sampling rate:** 20 MS/s, simultaneously on both channels; **Trigger delay:** 20 divisions of pre-trigger

#### VERTICAL:

**Resolution:** 8 bits; **Display modes:** YA, YB, -B; **HORIZONTAL:** **Display modes:** recurrent, single shot, multiple shot (up to 2)

**TIMEBASE:** **Recurrent, single shot, multiple shot:** 50 s/div...10  $\mu$ s/div

#### HORIZONTAL RESOLUTION:

**Single channel:** 8192 samples/channel; **Dual channel:** 4096 samples/channel

**CURSORS:** **Horizontal resolution (all display modes):** 1:1000 over 10 divisions

**Vertical resolution:** 1:200 over 8 divisions

**Read-out resolution:** 3 digits amplitude and time

**MEMORY:** **Depth:** 4096 words for acquisition as well as reference memory

## PM 3305

Digital storage oscilloscope



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- 35 MHz, 2 Msamples/s
- Four channels
- 4 K x 8-bit memory
- Pretrigger 4096 bits max
- Min/max mode

The PM 3305 combines the best of digital 'scope capabilities with those of a high-speed analog oscilloscope. It offers all standard features together with a digital storage memory, 4 channels, compare mode and, thanks to the min/max mode, capture of peaks and glitches down to 10 ns. The PM 3305 also offers features such as dual slope triggering, X-Y display and roll mode with up to 40 hours continuous recording for slow signal registration.

### SPECIFICATION SUMMARY

#### DISPLAY:

**CRT:** rectangular tube with 8 x 10 cm internal

**graticule;** **Acceleration voltage:** 10 kV

**VERTICAL DEFLECTION (CHANNELS A & B):**

**Bandwidth:** DC...35 MHz; **Deflection coefficient:** 2 mV/div...10 V/div

**VERTICAL DEFLECTION (CHANNELS C & D):**

**Bandwidth:** DC...1 MHz; **Deflection coefficient:** 0.1 V/div or 1 V/div

#### TIMEBASE (ANALOG):

**Deflection coefficient:** 0.5 s...100 ns/div

#### TIMEBASE (DIGITAL):

**Deflection coefficient:** 5 s...100 ns/div

#### MEMORY:

**Size:** 4 K x 8 bit; **Pre-trigger:** 4096 samples max;

**Vertical resolution:** 256 steps over 8 cm;

**Horizontal resolution:** single trace max. 1:4096;

**Sampling frequency:** 2 MHz max