

## DIGITAL OSCILLOSCOPES 50 MHZ TO 200 MHZ



GDS1000B Series



- 7" TFT LCD color screen WVGA 800 x 480 dots
- Backup: 24 curves and 20 configurations (setup)
- GO - NO GO functions
- $\Delta V$   $\Delta T$  cursors
- Data logger
- Assistant for test probes from x0.1 to x2000
- HELP button
- Multilanguage

| REF.                                      | GDS1102B   | GDS1202B | GDS1054B | GDS1104B |
|---|--|----------|----------|----------|
| Number of channels                        | 2  | 2        | 4        | 4        |
| Bandwidth at -3dB                         | 100MHz   | 200MHz   | 50MHz    | 100MHz   |
| Rise time                                 | 3.5ns  | 1.75ns   | 7ns      | 3.5ns    |
| Sampling frequency per channel            | 1 GSa/s in real time, 25 GSa/s in equivalent time  |          |          |          |
| Memory depth per channel                  | 10.000.000 points  |          |          |          |
| Vertical resolution                       | 8 bits   |          |          |          |
| Sensitivity / Precision                   | 1mV/div to 10V/div / 4% for 1mV, 3% $\geq$ 2mV   |          |          |          |
| Time base / Precision                     | 5ns/div to 100s/div sequence 1 - 2 - 5 / $\pm$ 50ppm on time interval $\geq$ 1ms   |          |          |          |
| Advanced triggers                         | Auto - Normal - Single shot - Front - Pulse width - TV - Rise / Fall - Expired delay - External delay  |          |          |          |
| Mathematical Functions - FFT              | $\div$ + - x FFT, FFTrms, FFT Zoom, XY (phase shift 3%)  |          |          |          |
| Automatic measurement                     | 36   |          |          |          |
| Automatic voltage measurement             | Peak to peak, Max, Min, Amplitude, High, Low, Average, Cycle average, RMS, Cycle RMS, Zone, Cycle zone, Rise and fall overrun, Rise and fall pre-overrun |          |          |          |
| Automatic period or frequency measurement | Frequency, Period, Rise and fall time, Width + and -, Duty cycle, Pulses +, Pulses, Pulse edge + and -, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase    |          |          |          |
| CURSORS MEASUREMENT                       | $\Delta V$ $\Delta T$  |          |          |          |
| Autoset functions                         | yes (deactivation possible)  |          |          |          |
| Interfaces                                | Hi-Speed USB2.0  |          |          |          |
| Supply                                    | 100 - 240VAC. 50Hz ~ 60Hz, 30W   |          |          |          |
| Dimensions                                | 380 x 208 x 124mm  |          |          |          |
| Weight                                    | 2,8kg  |          |          |          |
| Delivered with                            | Software on CD - Instructions  |          |          |          |

### COMPLEMENTARY ACCESSORIES

#### Differential probes



#### Current probes



#### Clamps



#### Coaxial accessories



## GDS1000A-U SERIES SPECIFICATIONS

| <b>COMMON CHARACTERISTICS TO THE 4 MODELS</b> |  |
|---|--|
| <b>VERTICAL AMPLIFIERS</b>                    | 2 or 4 channels depending on models  |
| Input impedance                               | 1M $\Omega$ // 16pF  |
| Calibrated attenuator / Precision             | 1mV/div at 10V/div / 4% for 1mV, 30% for the rest  |
| Coupling                                      | AC - DC - ground   |
| Max voltage                                   | 300 Vrms CAT I   |
| Offset shift                                  | 1mV / div: $\pm$ 1.25V<br>2mV / div to 100mV / div: $\pm$ 2.5V<br>200mV / div to 10V / div: $\pm$ 125V   |
| <b>OPERATING MODES</b>                        | + , x, $\div$ , FFT, FFTrms, User defined expression   |
| TRIGGER                                       | Auto, normal, single shot, TV Flank, pulse width   |
| sources                                       | CH1, CH2, sector, ext. (CH3, CH4 for 4-channel models)   |
| pre-trigger                                   | 0 to 10 divisions  |
| post-trigger                                  | 0 to 2,000,000 divisions   |
| couplings                                     | AC, DC, HF, LF, REJ noise  |
| trigger sensitivity                           | 1 div  |
| <b>ACQUISITION</b>                            |  |
| sampling modes                                | Normal, Average, Peak detection, Single  |
| <b>SAMPLING FREQUENCY</b>                     |  |
| In real time                                  | 1 Gsa/s on each channel  |
| Vertical resolution                           | 8 bits   |
| Record length                                 | 10M points   |
| <b>TIME BASES A and B</b>                     |  |
| Ranges / Precision - Time bases               | 5ns / div to 100s / div sequence 1-2-5 / 4% for 1mV, 3% $\geq$ 2mV   |
| Modes   | Normal, scroll, window, zoom to window, XY   |
| Time base B                                   | Selection of the "window" zone then window zoom  |
| <b>AUTOMATIC MEASUREMENT</b>                  | <b>36</b>  |
| Automatic voltage measurement                 | Peak to peak, Max, Min, Amplitude, High, Low, Average, Cycle average, RMS, Cycle RMS, Zone, Cycle zone, Uphill and downhill overrun, Pre-overrun of ascent and descent |
| Automatic period or frequency measurement     | Frequency, Period, Rise and fall time, Width + and -, Duty cycle, Pulses +, Pulses, Impulse front + and -, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase               |
| CURSORS MEASUREMENT                           | $\Delta V$ $\Delta T$ $\Delta f$   |
| <b>OTHER FUNCTIONS</b>                        |  |
| Screen display                                | Alphanumeric column takes again the configuration of the ranges, scanning, synchro, coupling, acquisition etc ...  |
| HELP key for use                              | Reminds the screen of the role of the front panel keys   |
| Various functions                             | GO-NO GO, Data logger, Multi languages, Ethernet (4-channel models only)   |
| <b>USB HOST / USB DEVICE port</b>             | <b>High speed USB2,0</b>   |
| <b>MISCELLANEOUS CHARACTERISTICS</b>          |  |
| Adjustable backlit LCD display                | 7 " TFT WVGA color LCD screen (800 x 480 / 8 x 10 division)  |
| Dimensions / Weight                           | 380x208x124 mm / 2.8kg / carrying handle   |
| Supply  | 100 to 240 VAC   |
| IEC   | 300Vrms CAT I  |

