

# DL SERIES

Digital Oscilloscopes / Digital ScopeCorder



## Common features of the DL Series

### Multiple number of channels

Operation of the DL Series is quick and intuitive with up to 8 analog input channels.



### 3.5 inch FDD



All the DL series have an MS-DOS compatible FDD. Easy firmware upgrades are guaranteed. Saving display images in TIFF / BMP format is supported for DTP use, not to mention saving / loading of waveform data files or panel configuration files.

### High speed signal processing

Thanks to the high speed processing and optimum architecture, you do not have to wait to zoom in / out of a captured waveform.

### Long memory



From the 20K word record size of the DL1520 to the 16M word of the DL708, the DL Series offers the advantages that Long memory waveform measuring instruments should have.

### Built-in printer



The line head internal printer in the DL Series can print out display image in about 10 seconds. Some models even offer real time printing just like a chart recorder.

# DL Series

## DL708

High performance/cost digital ScopeCorder



8 Isolated input channels (Plug in modules )  
Max. 10MS/s (10 bit), 100kS/s (16 bit)  
Max. 16M word  
Real time signal recording to the internal HDD  
10.4 inch color TFT display  
Light weight (approx. 6kg)

Maintenance and inspection of turbines  
Measuring the behavior of engines  
Monitoring large plants  
Monitoring operation of press machines  
Observing impact and vibration tests

## DL708

Plug-in modules



High speed isolation  
/ High speed module  
1 analog input  
Max. 10MS/s  
10 bit resolution



Temperature module  
1 Thermocouple input  
Applicable thermocouples  
K, E, J, T, L, U, N, R  
S, B, W, KP vs Au7Fe



High resolution, High voltage isolation  
/ High resolution isolation module  
1 analog input  
Max. 100KS/s  
16 bit resolution



Logic input module  
Max. 16 logic inputs  
Max. 10MS/s

## DL2700

Long memory / multiple channels  
High speed processing



4 channel configurations (2,4,6 or 8 channels)  
Max. 500MS/s (8 bit)  
3 memory configurations  
(Max. 1M, 4M or 16M word)  
Built-in 3.5 inch MO drive (230MB)  
8.4 inch color TFT display

Evaluating magnetic recording devices  
Observing modulated signals  
Evaluating transient response of a circuit  
Measuring a composite TV signal  
Trouble shooting electronics or electric devices

## DL4100/DL4200

10 bit Digital Oscilloscope



Full range 4 channel  
Max. 100MS/s (10 bit)  
Max. 100k word  
Max. 60 displays / sec update rate  
Built-in 3.5 inch FDD  
On-line HELP  
10 inch CRT

Analyzing a composite signal  
Evaluating a complex modulated signal  
Observing a servo signal  
Evaluating electric control circuit

## DL1540 / DL1540L

4 channel portable bench top DSO



Full range 4 channel  
Max. 200MS/s (8 bit)  
Max. 120k word (DL1540)  
Max. 2M word (DL1540L)  
Max. 60 displays / sec update rate  
Built-in 3.5 inch FDD  
Real time printing function

Evaluating magnetic recording devices  
Observing modulated signals  
Evaluating transient response of a circuit  
Measuring a composite TV signal  
Trouble shooting electronics or electric devices

## DL1520 / DL1520L

2 channel model of the DL1500 series



2 channel inputs  
Max. 200MS/s (8 bit)  
Max. 20k word (DL1520)  
Max. 1M word (DL1520L)  
Max. 60 displays / sec update rate  
Built-in 3.5 inch FDD  
Real time printing function  
Light weight (approx. 6kg)

Monitoring a composite TV signal  
Observing a general electric signal  
Measuring long term trend of a signal

# DL Series selection chart

	DL1540	DL1540L	DL1520	DL1520L	DL4100	DL4200	DL2700	DL708
Max. Sample rate	200Ms/s	200Ms/s	200Ms/s	200Ms/s	100Ms/s	100Ms/s	500Ms/s	10MS/s (*1)
Analog BW	150M	150M	150M	150M	150M	300M	150M	4M (*1)
Single Shot BW	80M	80M	80M	80M	40M	40M	150M	4M (*1)
Number of input channels	4	4	2	2	4	4	2,4,6,8	Max. 8 (*2)
External trigger input	YES	YES	YES	YES	YES	YES	YES	YES
Max. sensitivity	1mV/div	1mV/div	2mV/div	2mV/div	2mV/div	2mV/div	2mV/div	5mV/div
Vertical resolution	8bit	8bit	8bit	8bit	10bit	10bit	8bit	16bit (*1)
Fastest sweep time	5ns/div	5ns/div	5ns/div	5ns/div	2ns/div	2ns/div	2ns/div	500ns/div (*1)
Max. record size	120K	2M	20K	1M	100K	100K	1M, 4M or 16M	16M (*3)
External clock input	YES	YES	YES	YES	YES	YES	YES	NO
Enhanced trigger	YES	YES	YES	YES	YES	YES	YES	YES
Inter channel computation	YES	YES	YES	YES	YES	YES	YES	YES
Advanced math function	YES	YES	YES	YES	YES	YES	YES	YES
External recording media	FDD	FDD	FDD	FDD	FDD	FDD	FDD 230MB MO	FDD 2.1GB HDD
Dimensions (mm) W × H × D	213×273×250	213×273×250	213×273×250	213×273×250	398×220×427	398×220×427	426×221×425	370×260×183
Weight (kg)	5	6	6	6	15	15	16	5.3 (*4)

\*1) Varies depending on a plug-in module

\*2) Plug-in module type

\*3) 128M word in real time HD recording mode

\*4) Main unit only (excluding the plug-in modules)

#### NOTICE

- Before operating the product, read the instruction manual thoroughly for proper and safe operation.
- If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.

## YOKOGAWA

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