Main Specifications (SL1000 Main Unit)

Basic Specifications

Input format	Plug-in module (A/D converters built in to each unit)
Number of slots	8
Max number of channels	16
Maximum sample rate*1	100 MS/s on all channels
Max. recording length (internal memory)	50 MW/ch (trigger mode: Single, measuring on 1 module, 2 channels)
Build-in hard disk	40 GB (with /HD1 option)
Maximum speed for saving in real time	
Build-in hard disk	1.6 MS/s (=100 kS/s × 16ch, with /HD1 option)*2
Signal I/O	External clock input :BNC × 1
	External trigger input :BNC × 1
	Trigger output :BNC × 1
	Alarm output :Screwless terminal × 1
	GO/NO-GO output :Screwless terminal × 1
	REMOTE input :Screwless terminal × 1
Probe power terminal	Supplies up to 4 probes (with /P4 option)
USB communication	Conforms to USB Revision 2.0
Ethernet	1000 BASE-T compliant (with /C10 option)

General Specifications

Rated supply voltage	100-120 VAC/220-240 VAC (switches automatically)
Rated supply frequency	50/60 Hz
Power consumption	300 VA max (including modules)
External dimensions	319 mm (W) × 154 mm (H) × 350 mm (D), excluding protrusions
Weight	Approx. 6 kg (SL1000 main unit only)
Operating temperature range	5-40°C

*1: Maximum sample rate differs depending on the type of module.
   If the sampling frequency exceeds the maximum sample rate of the module, identical data will be recorded.
*2: Typical values. Actual values depend on measurement conditions.

Main Specifications (Acquisition Software is Standard)

Plug and Play	Auto-recognition of units and modules
Measurement modes	Freerun and triggered
ACQ mode	Normal, envelope, and box average
Clock sources	Internal and external
Measurement groups	Up to 4 groups definable with independent sample rates
Trigger modes	Normal, single, and single(N)
Trigger sources	CH1-CH16, LINE, Time, and External
Other trigger functions	Combination trigger, hold-off, pretriggers, and trigger delay
Save conditions	Manual operation, or based on time, or alarms
Other save functions	Manual save (file division), specify no. of saves, and save all data in memory
	Save simultaneously to PC's hard disk and SL1000's internal hard disk (with /HD1 option)
Save format	Binary data files (original, *.wdf)
Waveform data conversion (Xviewer)	Binary data file(s) can be converted to ASCII (*.csv) or Excel (*.xls) format
Maximum speed for saving in real time	
PC hard disk	1.6 MS/s (= 100 kS/s × 16 ch)*1
Waveform monitor	Trend display (displays measured waveforms of different sample rates simultaneously)*2,
	and instantaneous value displays (digital, bar graph, meter, and thermometer)
Display groups	Up to 4 display groups
Other display functions	History waveform, arbitrary axis divisions,
	and horizontal axis scaling + specifiable units (ext. clock)
Waveform analysis	Cursor and parameter measurement*3
Offline waveform computation (with /XV1 option)	
Max. Number of displayed waveforms (CHs)	
	10 waveforms (Math1 to Math 10)
Operations	+, -, ×, /, trigonometry, differentiation/integration, FFT, and others
Alarms	Channel (alarm display and alarm history analysis)*4,
	system, and alarm output
GO/NO-GO determination*3	Waveform parameter judgment and judgment output
System requirements	
OS	Windows 2000 (SP4 or later)/Windows XP (SP2 or later)
CPU	Pentium 4, 2 GHz or faster (3.2 GHz or faster recommended)
Memory	512 MB or more (1 GB or more recommended)
Hard disk	500 MB or more of free space (40 GB or more recommended)
Communication interfaces	USB 2.0/Ethernet 1000 BASE-T (with /C10 option)

*1: Typical values. Actual values depend on PC performance and measurement conditions.
*2: When the measurement mode is Freerun, the trigger mode is Single(N), and the number of measurements is Infinite, there may be a limit to the number of channels that can be trend-displayed during measurement.
*3: Triggered measurement *4:Freerun measurement

Exterior Dimensions
(Unit: mm)

Rear View
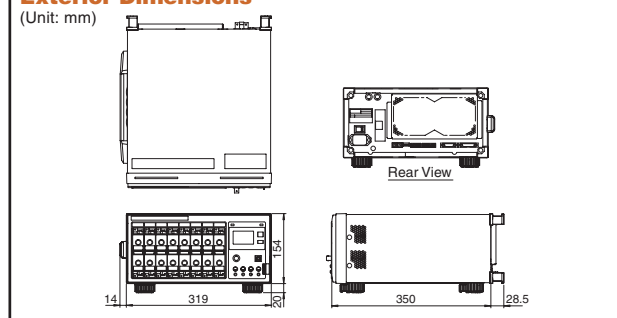
SL1000 Model Number and Suffix Codes

Model/Options	Suffix Code		Description
720120			SL1000 High-Speed Data Acquisition Unit*1
			Including Xviewer Standard Edition (1 license)(701992-SP01)
Power cable	-D		UL and CSA standard
	-F		VDE standard
	-R		AS standard
	-Q		BS standard
	-H		GB standard (Complied with CCC)
Others		/HD1	Internal 40 GB hard drive
		/C10	Ethernet Interface
		/P4	Probe power (4-output)
		/XV0	Without Xviewer*2
		/XV1	With the Xviewer Math Edition (1 license)(701992-GP01)

*1: Plug-in modules and PC not included with the SL1000.
*2: Xviewer required to access the internal hard disk with a USB connection.

Standard Accessories

Product	Order Q'ty
Power cable	1
Acquisition Software, Xviewer (701992)(CD-ROM)	1
User's manuals (one set)	1
Cover panels (for blank module slots)	8
Rubber feet (two per set)	1
Soft case (for storing accessories)	1

Probes, Cables, and Converters

Product	Model No.	Description*1
10:1 Probe (for Isolated BNC Input)	700929	1000 Vrms-CAT II
1:1 Safety BNC Adapter Lead (in combination with followings)	701901	1000 Vrms-CAT II
Safety Mini-clip (Hook Type)	701959	1000 Vrms-CAT II, 1 set each of red and black
Large Alligator-Clip (Dolphin type)	701954	1000 Vrms-CAT II, 1 set each of red and black
Alligator Clip Adaptor Set (Rated Voltage 1000V)	758929	1000 Vrms-CAT II, 1set each of red and black
Alligator Clip Adaptor Set (Rated Voltage 300V)	758922	300 Vrms-CAT II, 1set each of red and black
Fork Terminal Adaptor Set	758921	1000 Vrms-CAT II, 1 set each of red and black
Passive Probe*2	701940	Non-isolated 600 Vpk (701255)(10:1)
1:1 BNC-Alligator Cable	366926	Non-isolated 42 V or less, 1 m
1:1 Banana-Alligator Cable	366961	Non-isolated 42 V or less, 1.2 m
Current Probe*3	701933	30 Arms, DC to 50 MHz, supports probe power
Current Probe*3	701930	150 Arms, DC to 10 MHz, supports probe power
Current Probe*3	701931	500 Arms, DC to 2 MHz, supports probe power
Probe Power Supply*4	701934	Large current output, external probe power supply (4 outputs)
Shunt Resistor for Clamped Input Terminal	438920	250 Ω ±0.1%
Shunt Resistor for Clamped Input Terminal	438921	100 Ω ±0.1%
Shunt Resistor for Clamped Input Terminal	438922	10 Ω ±0.1%
Bridge Head (NDIS-120 Ω)	701955	With 5 m cable
Bridge Head (NDIS-350 Ω)	701956	With 5 m cable
Bridge Head (DSUB-120 Ω, Shunt-CAL)	701957	With 5 m cable
Bridge Head (DSUB-350 Ω, Shunt-CAL)	701958	With 5 m cable
BNC Conversion Adaptor	758924	500 Vrms-CAT II
Safety BNC-BNC Cable (1 m)	701902	1000 Vrms-CAT II (BNC-BNC)
Safety BNC-BNC Cable (2 m)	701903	1000 Vrms-CAT II (BNC-BNC)

*1: Actual allowable voltage is the lower of the voltages specified for the main unit and cable.
*2: 42 V is safe when using the 701940 with an isolated type BNC input.
*3: The number of current probes that can be powered from the main unit's probe power supply is limited. For details, please refer to http://www.yokogawa.com/tm/pdf/bu/701933/tm-701933_01.pdf.
*4: Any number of externally powered probes can be used.

* isoPRO is the whole trademark application.
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NOTICE

● Before operating the product, read the user's 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.