isoLynx® SLX718

Data Logger/Data Acquisition System

Unrivaled Flexibility and Performance
Small Size, Low Cost

Created by the combination of compact SLX718 instruments and miniature SensorLex™ 8B isolated analog signal conditioners, the new, versatile family of SLX718 Data Logger/Data Acquisition Systems provides stand-alone or PC-tethered operation.

DATAFORTH®

isoLynx® SLX718

Data Logger/Data Acquisition System

Compact SLX718 instruments combined with Dataforth's miniature SensorLex™ 8B isolated analog signal conditioners create the most flexible high performance data logger/data acquisition system on the market.

SLX718 instruments with stand-alone data logging option

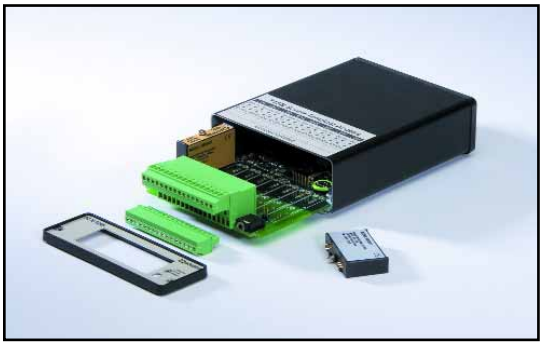
- Built-in multimedia socket accepts standard Secure Digital (SD) memories, which can store acquired data without a connected PC
  - Memories ranging from 16MB to 1GB are supported
- First in price range to offer data acquisition server capability, allowing stand-alone instruments to locally and independently add data to SD memories
  - Ethernet stand-alone units enable SD memory data to be uploaded via Ethernet interface
- Stream data to removable SD memory cards at throughput rates ranging from 14,400 samples per second maximum to 6.2 samples per hour minimum

SLX718 instruments with continuous connection capability

- Must remain tethered to PC's USB or Ethernet port
- Use PC's own program and memory to store acquired data
- Stream data to removable SD memory cards at throughput rates ranging from 4,800 samples per second maximum to 172.8 samples per hour minimum

SensorLex™ 8B modules

- Install up to eight 8B modules - of any 90+ input types - directly into the SLX718 unit, allowing signal conditioning functions to be mixed and precisely matched to each application
- Each 8B module protects, filters, amplifies, and isolates an input signal, ensuring an advanced signal conditioning solution for nearly any industrial measurement



Applications

Data acquisition for monitoring and recording in maintenance, troubleshooting, and quality control, including:

Load cells for strain, force, torque

Voltage ranging from millivolts to 60V

4-20mA process current loops

RTDs and thermocouples

In-vehicle automotive testing

New product qualification testing

Timing and amplitude measurements

PC-tethered SLX718 instruments

Designed for use anywhere an instrument can remain connected to a laptop or desktop PC. The SLX718 USB option requires a PC to be local to within 5 meters (15 feet), while the Ethernet option allows the PC to be used either locally or remotely (up to 100 meters without hubs).

Stand-alone SLX718 instruments

Used for the same applications as PC-tethered versions. Specifically designed for those who cannot locate a PC near the instrument and want easy, efficient access to remotely recorded information over their Ethernet LAN.

Feature	isoLynx® SLX718	Benefit
Up to eight 8B signal conditioning modules can be installed directly into each SLX718 instrument		Allows direct measurement of virtually any industrial signal without the need for external amplifiers
Any input type 8B signal conditioner can be installed in any of the eight locations		Allows signal conditioning functions to be mixed in a manner that precisely matches the application
8B signal conditioning modules are fully isolated		Input-to-output isolation is maintained up to 1,000VDC or peak AC; channel-to-channel isolation is 500VDC or peak AC
14-bit resolution analog-to-digital conversion		Resolution capable of registering changes as small as one part in 16,384
Built-in programmable channel scan list		Precisely match signal requirements on a channel-by-channel basis
Wide sample rate throughput range from milli hertz to over 14,400Hz		Allows the SLX718 to connect to a wide range of both static and dynamic signals
Built-in remote control jack		Accepts a standard 3.5mm stereo phone plug for access to remote trigger or start/stop events (WINDAQ® software feature)
USB or Ethernet interface options		Allows the SLX718 to reside externally to the PC for easy access and greater flexibility
Two removable 16-position screw terminal connectors		Allows simple hardware change without disturbing wiring
All metal enclosure		Provides a rugged, CE compliant design for field use and reduces susceptibility to external noise sources
Three package options: Benchtop, NEMA & OEM pcb board		Versatility for benign and harsh applications
Powered from any 9-36VDC source		Can be used in automotive and other portable environments where only battery power is available
AC adapter provided with Benchtop enclosure		Allows the SLX718 to be powered from any AC power source

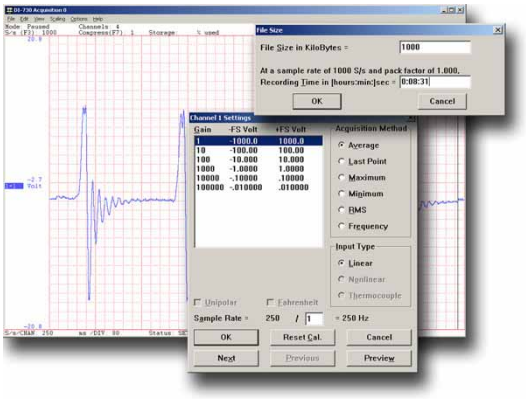
Additional Stand-Alone Features & Benefits

Built-in Secure Digital (SD) card socket	Uses the same readily available memory cards used by consumer electronic devices like MP3 players and digital cameras
SD memory capacities from 16MB to 1GB	Allows the SLX718 to store large amounts of data
Circular FIFO or stop-on-full memory configurations	Record continuously, using a circular buffer approach, or terminate upon full SD memory card
Multifunction push-button control	Manual start/stop local control of the recording process
Multicolored red, green, orange LED	Visual feedback relating to instrument status: Recording, Standby, Busy, and Error
Built-in real-time clock	All data stored to the SD memory can be time-and date-stamped
PC-tethered or stand-alone capability	Allows data to be acquired directly either to SD memory or to a dedicated PC

Supported Software

Module	Benefit
WinDaq®/Lite (Included with each SLX718)	Provides a ready-to-run, no programming environment for acquiring, displaying, recording, reviewing, analyzing, and exporting waveform information for PC-tethered or stand-alone configurations. Limited to 1,108Hz throughput to disk.
WinDaq®/HS (Upgrade with full license)	Similar to WinDaq®/Lite except allows throughput to disk rates of 4,800Hz
WinDaq®/XL (Low-cost add-on)	Real-time data logging to Microsoft Excel spreadsheets
ActiveX Library (Included with each SLX718)	Allows basic programming of SLX718 functions using Windows programming languages like Visual BASIC and C++

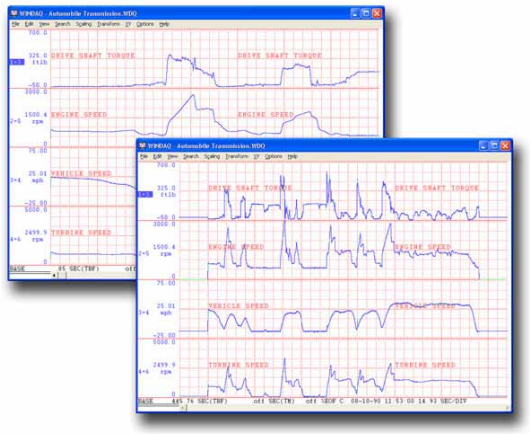
WinDaq® Recording Software: Channel Setup



Double-click and enter the channels you want to add to the WinDaq® scan list. Click to select gain, signal averaging, true RMS, frequency, and peak or valley detection per channel. Click to define a single to 8-channel display - either triggered sweep (oscilloscope-like) or scrolling (chart recorder-like). Click again to define a sample rate ranging from less than one up to 14,400 per second. With WinDaq®/HS you can also define different sample rates on a per channel basis.

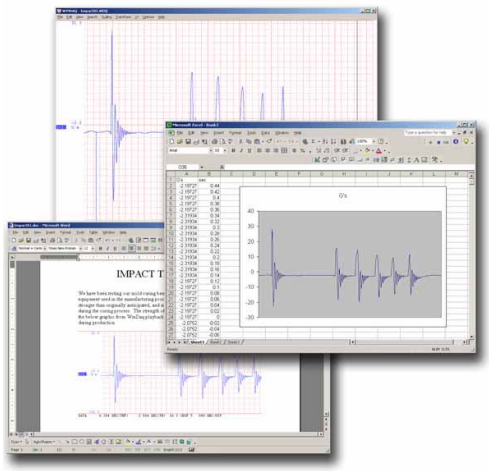
WinDaq® Playback Software

Playback



Recording is only half the solution. WinDaq®'s Waveform Browser playback software allows you to graphically manipulate waveforms in a variety of ways. Compress an entire recording to one screen-width for a bird's eye view; then expand around an area of interest for a closer look. Use the cursor to measure amplitudes and timing with precision, or move to any event marker with the click of a mouse button.

Export



The WinDaq® Waveform Browser can export any range of data to your spreadsheet or to any other analysis or presentation package. You can copy a graphical image displayed by the WinDaq® Waveform Browser and paste it directly into a word processing document. You also can export any range of waveform graphics to your printer for a hard copy record.

Packaging

SLX718B with Benchtop Enclosure

Housed in a small 15.11D x 10.57W x 4.06H centimeters (5.95D x 4.16W x 1.6H inches) enclosure consisting of an-aluminum base, all-steel wraparound and aluminum end plates.

SLX718N with NEMA 4 (IEC 529, IP 66) Enclosure

Housed in an industrial junction-box enclosure designed to protect against harsh industrial environments, the isoLynx® SLX718 system is mounted on standoff legs on a removable 14-gage inner galvanized steel panel. The enclosure is constructed with 16-gage steel and measures 25.44H x 20.32W x 10.16D centimeters (10H x 8W x 4D inches). It is compliant to UL 508 Type 3R, 4, 12, 13; CSA Type 3R, 4, 12, 13; NEMA Type 3R, 4, 12, 13; and IEC 529 and IP 66 standards.

SLX718S Skeleton PCB-Board-Only for OEM/Embedded Use

Consists of fully tested printed circuit boards individually sealed in a conductive poly-bag.

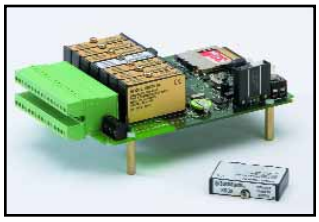
The isoLynx® SLX718 data logger/data acquisition system is best utilized when driven by DATAQ® Instruments' popular WINDAQ® software. Together, the special features of the SLX718 unit and the 8B isolated signal conditioning modules produce a robust instrument that can be applied to virtually any industrial data acquisition or data logging situation, especially those requiring a rugged, amplified, isolated solution.

How to Order isoLynx® SLX718 Data Logger/Data Acquisition Systems:

Lab/R&D Benchtop SLX718B

Industrial NEMA 4 Enclosure SLX718N

Embedded/OEM Circuit-board SLX718S



Benchtop Enclosure	
SLX718B-U	USB for PC-connected Operation
SLX718B-US	USB with Stand-alone SD Card Slot
SLX718B-E	Ethernet for PC-connected Operation
SLX718B-ES	Ethernet with Stand-alone SD Card Slot
NEMA Enclosure	
SLX718N-U	USB for PC-connected Operation
SLX718N-US	USB with Stand-alone SD Card Slot
SLX718N-E	Ethernet for PC-connected Operation
SLX718N-ES	Ethernet with Stand-alone SD Card Slot
OEM Board Only	
SLX718S-U	USB for PC-connected Operation
SLX718S-US	USB with Stand-alone SD Card Slot
SLX718S-E	Ethernet for PC-connected Operation
SLX718S-ES	Ethernet with Stand-alone SD Card Slot
Software	
SLX718-WinDaq/Lite	Included Data Acquisition Software
SLX718-WinDaq/HS	High-Speed Data Acquisition License
SLX718-WinDaq/XL	Real-time Data Logging to Microsoft Excel
SensorLex 8B Modules	
All 8B Input Modules	Visit **www.dataforth.com** for listing & specs

Dataforth Corporation—High Performance Industrial Signal Conditioning, Data Acquisition, and Data Communication Products Since 1984

DATAFORTH®
Instrument Class®

The Dataforth Quality Management System is ISO9001:2000 Registered

Call 800-444-7644 for more information or visit our website **www.dataforth.com.**

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