

ACCELEROMETER MONITORING DATA ACQUISITION SYSTEM

ST300 DatAQ – LITE

The ST300 DatAQ LITE series is a family of data acquisition instruments specifically designed to measure and record signals from the ST703 capacitive accelerometers. They offer 16-bit, 100 KHz data sampling capability and communicate through the PC's Universal Serial Bus (USB) port.

The Portable series combines all of the data acquisition horsepower delivered in a convenient sized carrying case, while the Remote series is designed to be mounted permanently in the field.

Custom Windows compatible application software is also available upon request. Typical uses of this system include:

- Predictive Maintenance Analysis
- Process Monitoring

KEY FEATURES

- Multiple channels (32, 16, 8 & 4)
- High resolution capability
- USB true plug-and-play, one cable supplies both sensor power and all communication
- Industry compatible (LabView, others)
- 500V isolation provides low noise measurements
- Remote series offers NEMA 4X stainless steel cabinet
- Portable series offers rugged aluminum carrying case

SPECIFICATIONS

Performance	Units	Portable	Remote
Input Resolution	Bits	16	16
Sample Rate	kS/s	100	100
Channels	Qty (max)	32	32
Isolation	V	500	500
Electrical			
Analog Inputs	V	±10	
Sensor Supply	V	+12	
Supply Power	VAC	120	
Optional Battery Powered	VDC	24 (battery)	
Mechanical			
Dimensions	in	13x18x6	24x24x8
Weight	lbs	8	15
Case Seal	Type	Water resistant	NEMA 4X
Operating Temperature	°C	-5 to 70	
Sensor connectors	Type	4, 6 & 8 pin (M12)	
I/O Connector	Type	USB or Ethernet (RJ45)	

ST300 LITE Portable model



Sequence Technologies designs and manufactures all of its circuitry in the ST300 series systems. This allows us to customize each system to your application.

ST300 LITE Remote model



Portable series includes rugged aluminum carrying case.

Remote series includes NEMA 4X cabinet for protection of internal circuitry in harsh mill conditions.

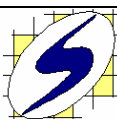
HARDWARE ACCESSORIES



ST703 series Capacitive Accelerometer sensors

BENEFITS

- ◆ Enable in-house data collection
- ◆ Obtain accurate real-time data
- ◆ Facilitate ISO certification
- ◆ Eliminate down time



PRODUCT SPECIFICATIONS

PORTABLE System (LITE/P)

ITEM	PART No.	Name	Description	Qty	COST
Component Hardware Pricing (ST300-LITE Portable model)					
1	CRB - LITE	Carrier board (LITE version)	16 ch main board	1	Please call for pricing and availability
2	DAB	Data acquisition board	16 ch A/D board	1	
3	CON	Connector terminal	8 pin connector	1	
4	USBE	Universal serial bus extender	Hub & extender	1	
5	PB	Enclosure	Portable carrying case	1	
			- Aluminum design		
			- Water-resistant seal		
			- 13 x 18 x 6 (L x W x H) inch		

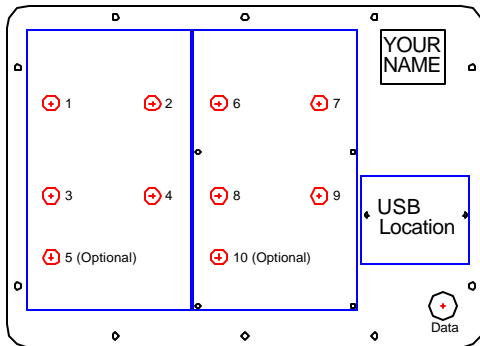
ORDERING INFORMATION

ST300-LITE/ X / X- X
ENCLOSURE STYLE
 P= Portable
CHANNELS
 4= 4ch
 8= 8
 16= 16
 24= 24
 32= 32
USB Option
 Blank= No USB
 U= USB option

EXAMPLE ORDER: ST300-LITE/F/16-U

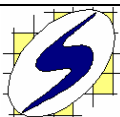
16 channel Portable LITE consists of the following hardware components:
 CRB-LITE (x1), DAB (x1), CON (x4), USBE (x1), PB (x1)

CONNECTOR LAYOUT



STANDARD CONNECTOR LAYOUT

Channel	Pin(s)	Compatibility
1-4, 5	8	Triaxial CAP accelerometer (ST703-3C)
6-9, 10	8	Triaxial CAP accelerometer (ST703-3C)



PRODUCT SPECIFICATIONS

REMOTE System (LITE/R)

ITEM	PART No.	Name	Description	Qty	COST
Component Hardware Pricing (ST300-LITE Remote model)					
1	CRB-LITE	Carrier board (LITE version)	16 ch main board	1	Please call for pricing and availability
2	DAB	Data acquisition board	16 ch A/D board	1	
3	CON	Connector terminal	8 pin connector	1	
4	USB	Universal serial bus	Hub & extender	1	
5	FB	Enclosure	Field Junction box	1	
			- NEMA 4X design		
			- Custom sizes		

ORDERING INFORMATION

ST300-LITE/ X X / X- X

ENCLOSURE STYLE
R= Field Junction Box

CONNECTOR LAYOUT
S= Screw connectors
T= Terminal connectors

USB Option
Blank= No USB
U= USB option

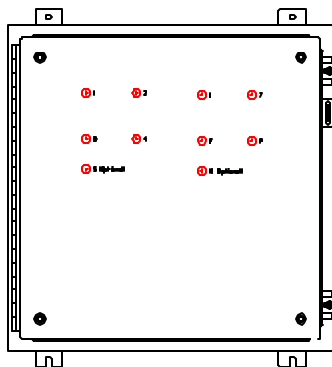
CHANNELS
4= 4ch
8= 8
16= 16
24= 24
32= 32

EXAMPLE ORDER: ST300-LITE/RS/32-U

32 channel Remote LITE with screw connectors consists of the following hardware components:
CRB-LITE (x2), DAB (x2), CON (x10), USBE (x1), FB (x1)

CONNECTOR LAYOUT

Screw Connector Mounting

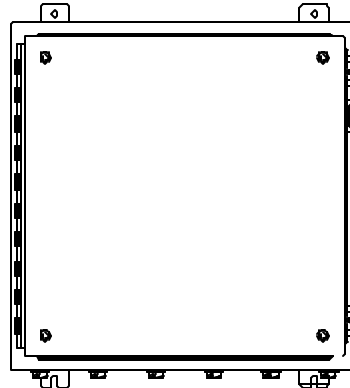


Screw connector design:
Sensor cables plug into the cable connectors mounted directly on the front of the cabinet door.

Enclosure size (L x W x D):
13 x 18 x 6in

Channel	Pin(s)	Compatibility
1-4, 5	8	Triaxial CAP accelerometer (ST703-3C)
6-9, 10	8	Triaxial CAP accelerometer (ST703-3C)

Terminal Connector Mounting



Terminal connector design:
Sensor cables plug into the bottom mounted cable connectors. The connectors are hardwired into terminal connectors on the data modules mounted inside the cabinet.

Enclosure size (L x W x D):
24 x 24 x 8in

Channel	Pin(s)	Compatibility
1-10	8	Configured per customer specifications

