

# PORTABLE DATA ACQUISITION SYSTEM

## ST300 DatAQ – MTS

The ST300 DatAQ - MTS Series is a family of versatile data acquisition instruments that offer 16-bit, 100 kHz data sampling capability. They communicate through the PC's Universal Serial Bus (USB) port. Each model is capable of handling a variety of sensor types, including the ST703 series accelerometers, ST303 series laser sensors and LVDT's. Also available from Sequence Technologies is our unique line of data acquisition software packages:

- **ST310 BearingVIEW** – turret bearing monitoring software (laser based)
- **ST311 LaserVIEW** – waveform recording software for laser sensors
- **ST312 MultiDAQ** – machine monitoring software for accelerometers and other sensors.

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

- *Turret Bearing Wear Analysis*
- *Predictive Maintenance Analysis*
- *Process Monitoring*

## KEY FEATURES

- Customized channels (32, 16, 8 & 4)
- Easy to connect and use
- USB true plug-and-play, one cable supplies both sensor power and all communication
- Industry compatible (LabView, others)
- 500V isolation provides low noise measurements
- Portable design allows remote monitoring
- Compact, rugged aircraft aluminum enclosure (water resistant)

## SPECIFICATIONS

Performance	Units	MTS
Input Resolution	Bits	16
Sample Rate	kS/s	100
Channels	Qty (max)	32
Isolation	V	500
<b>Electrical</b>		
Analog Inputs	V	±10
Sensor Supply	V	24 & ±12
Supply Power	VAC	120
Optional Battery Powered	VDC	24
<b>Mechanical</b>		
Dimensions	in	13 x 18 x 6
Weight	lbs	8
Case Seal	Type	Water resistant
Operating Temperature	°C	-5 to 70
Sensor connectors	Type	4, 6 & 8 pin (M12)
I/O Connector	Type	USB or Ethernet (RJ45)

ST300 MTS/32 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.

Rugged aircraft aluminum carrying case is strong and durable, ideal for industrial environments.

## HARDWARE ACCESSORIES

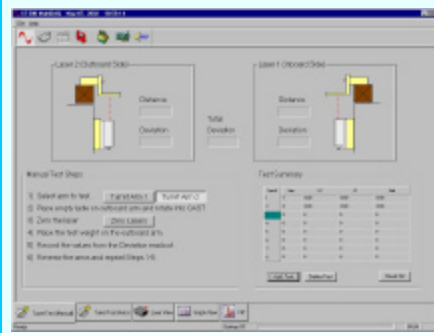


ST303 OptiGAGE  
Laser displacement sensor  
with bracket



ST703 series  
Accelerometer  
sensors

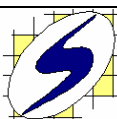
**SOFTWARE OPTIONS : ST310 BearingVIEW** – bearing analysis software is an interactive program designed to measure, capture and display bearing deflection measurements from the ST303 OptiGAGE laser sensors.



Additional software includes the ST311 LaserVIEW and ST312 MultiDAQ; both are Windows ready data acquisition programs capable of monitoring your most vital data. Compatible with LabView, others.

## BENEFITS

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



# PRODUCT SPECIFICATIONS

## PORTABLE System (MTS)

ITEM	PART No.	Name	Description	Qty	COST
<b>Component Hardware Pricing (ST300-MTS)</b>					
1	MOD4	Data acquisition module	4 ch data module	1	Please call for current pricing and availability
2	CNB4	Connector board	4 ch connector board	1	
3	CON	Connector terminal	4, 6 or 8 pin connector	1	
4	CRB	Carrier board	16 ch main board	1	
5	DAB	Data acquisition board	16 ch A/D board	1	
6	USBE	Universal serial bus extender	Hub & extender	1	
7	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- X / X - X

ENCLOSURE STYLE  
MTS= Portable

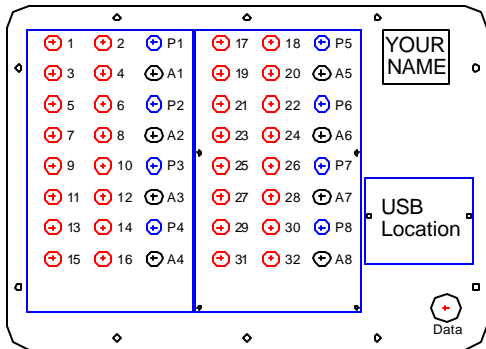
CHANNELS  
4= 4ch  
8= 8  
16= 16  
24= 24  
32= 32

USB Option  
Blank= No USB  
U= USB option

**EXAMPLE ORDER:** ST300-MTS/16-U

16 channel portable system consists of the following hardware components:  
MOD4 (x4), CNB4 (x4), CON (x24), CRB (x1), DAB (x1), USBE (x1), PB (x1)

### CONNECTOR LAYOUT



### STANDARD CONNECTOR LAYOUT

Channel	Pin(s)	Compatibility
1-32	6	Single & biaxial accelerometers & voltage inputs
P1-P8	4	Triaxial PZT accelerometer
A1-A8	8	Triaxial or Quad axis CAP accelerometer

**NOTE:** Each 4 channel data module (MOD4) is capable of monitoring (either/or):

- 4 single axis accelerometers
- 2 biaxial accelerometers
- 4 voltage inputs
- 1 triaxial PZT accelerometer
- 1 triaxial CAP accelerometer

