







SERIES 821

## SPARTAN SOUND LEVEL METER

- Easy-to-navigate, responsive, touch display
- Available as Class 1 (Model 821IH) or Class 2 (Model 721IH) Meter
- Built-in workplace noise dose and exposure metrics
- Wireless charging and data download
- Long battery life, up to 40 hours
- Optional 1/1 and 1/3 Octave Filters
- Languages supported: English, Français, Italiano, Português, Español

## TYPICAL APPLICATIONS

- Site Surveys
- Work Site Noise Maps
- Workplace Noise Exposure Measurements
- Tasked-based Noise Measurements
- Job-based Noise Measurements

## WORKPLACE NOISE MEASUREMENT

Designed for the Occupational Safety professional, Spartan Sound Level Meter Model 821 includes everything needed to simplify workplace noise level and noise exposure measurements. Spartan's rugged packaging makes it ideal for measurements in a wide range of environments.

The Spartan Model 821 includes a large, responsive touch display with all of the essentials for measuring workplace noise, offering

- A, C, and Z frequency weightings
- F, S, and I time weightings
- Full featured data logging

Spartan is ideal for site surveys and task-based noise exposure measurements like those outlined in ISO 9612. Built-in noise dose and LEX metrics simplify job-based noise exposure measurements.

Included G4 LD Utility software provides automatic wireless or USB data download, and convenient data storage options mean all data is available in a single results file. View tabular data, visualize results on a graph, create custom reports, and export data to a variety of formats.

The Spartan Sound Level Meter Model 821 together with Larson Davis quality and customer support delivers a robust and reliable workplace noise measurement solution.

CONFIGURATIONS				
MODEL	721IH	721IH-D	821IH	821IH-D
Class	2	2	1	1
Time History Logging	✓	✓	✓	✓
Measurement History	✓	✓	✓	✓
Dosimetry	✓	✓	✓	✓
OBA (1/1 and 1/3 Bands)	Optional	✓	Optional	✓

To 140 dB	SPECIFICATIONS		
Dynamic Range (A-weighted typical)         17 to 140 dB           Time Weightings         Fast, Slow, & Impulse           Frequency Weightings         A, C, & Z           Data Storage (microSD card)         B GB standard Up to 32 GB (µSDHC) and 256 (µSDXC)           Communication         USB-C, Bluetooth BLE 4.1           Display         480 x 800 color with capacitive touch           Power         Internal Lithium battery, USB-C or external 12 V           Battery Recharge         Qi Wireless, USB-C, or external 12 V           Typical Runtime (internal battery @ 22 °C)         40 hours (display off)           External Power         6 V to 24 V DC (720 mW typical with display off)           Logging         Time history: 1 s to 1 h Measurement History: 1 min to 6 h           Logging         Leq, Lmax, Lmin, Lpeak, Ln (6 values), Time above           1/1 and 1/3 Octave Metrics (Optional)         Leq, Lmax, Emin           (Optional)         AC/DC on 3.5 mm TRS jack           Operating Temperature         -30 to 60 °C           Dimensions (H x W x D)         260 x 83 x 32 mm           Weight         12.1 oz (383 g)           FILLERS (OPTIONAL)         Bandwidth           Bandwidth         1/1 and 1/3 Octaves           Frequencies (base 10)         1/1 and 1/3 Calas 1           Frequencies (base 10)			
Typical   Typi			
Prequency Weightings	typical)	17 to 140 dB	
S GB standard	Time Weightings	Fast, Slow, & Impulse	
Data Storage (microSD card)  Up to 32 GB (μSDHC) and 256 (μSDXC)  Communication  USB-C, Bluetooth BLE 4.1  A80 x 800 color with capacitive touch  Internal Lithium battery, USB-C or external 12 V  Battery Recharge  Qi Wireless, USB-C, or external 12 V  Typical Runtime (internal battery @ 22 °C)  External Power  Logging  Metrics  Acoustic  Acoustic  Time history: 1 s to 1 h Measurement History: 1 min to 6 h  Leq, Lmax, Lmin, Lpeak, Ln (6 values), Time above  10.1 x 3.3 x 1.3 inches 260 x 83 x 32 mm  ANSI S1.11-2014 Class 1 IEC 61267:21:2013 Class 2  821 Models: ANSI S1.4-2014 Class 1, IEC 61672-1:2013 Class 1 IEC 61252:2017  Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU	Frequency Weightings	A, C, & Z	
Display	Data Storage (microSD card)		
Internal Lithium battery, USB-C or external 12 V	Communication	USB-C, Bluetooth BLE 4.1	
## External 12 V    Battery Recharge	Display	480 x 800 color with capacitive touch	
Typical Runtime (internal battery @ 22 °C)  External Power  6 V to 24 V DC (720 mW typical with display off)  Time history: 1 s to 1 h Measurement History: 1 min to 6 h  Metrics  1/1 and 1/3 Octave Metrics (Optional)  Signal Output  Operating Temperature  Dimensions (H x W x D)  Bandwidth  1/1 and 1/3 Octaves  Frequencies (base 10)  Standards Compliance  Typical Runtime  40 hours (display off)  15 hours (display on)  6 V to 24 V DC (720 mW typical with display off)  Time history: 1 s to 1 h Measurement History: 1 min to 6 h  Leq, Lmax, Lmin, Lpeak, Ln (6 values), Time above  Leq, Lmax, Lmin  AC/DC on 3.5 mm TRS jack  Operating Temperature  -30 to 60 °C  10.1 x 3.3 x 1.3 inches 260 x 83 x 32 mm  Weight  12.1 oz (383 g)  FILTERS (OPTIONAL)  Bandwidth  1/1 and 1/3 Octaves  1/1: 8 Hz to 16 kHz 1/3: 6.3 Hz to 20 kHz  ANSI S1.11-2014 Class 1 IEC 61260:2014 Class 1 IEC 61260:2014 Class 1 IEC 61672-1:2013 Class 2  821 Models: ANSI S1.4-2014 Class 2, IEC 61672-1:2013 Class 2  821 Models: ANSI S1.4-2014 Class 1, IEC 61672-1:2013 Class 1  ANSI S1.25-1991 IEC 61252:2017  Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU	Power	,	
(internal battery @ 22 °C)         15 hours (display on)           External Power         6 V to 24 V DC (720 mW typical with display off)           Logging         Time history: 1 s to 1 h Measurement History: 1 min to 6 h           Metrics         Leq, Lmax, Lmin, Lpeak, Ln (6 values), Time above           1/1 and 1/3 Octave Metrics (Optional)         Leq, Lmax, Lmin           Signal Output         AC/DC on 3.5 mm TRS jack           Operating Temperature         -30 to 60 °C           Dimensions (H x W x D)         10.1 x 3.3 x 1.3 inches 260 x 83 x 32 mm           Weight         12.1 oz (383 g)           FILTERS (OPTIONAL)         1/1 and 1/3 Octaves           Frequencies (base 10)         1/1 and 1/3 Octaves           Frequencies (base 10)         ANSI S1.11-2014 Class 1 IEC 61260:2014 Class 1           Standards Compliance         ANSI S1.1-2014 Class 1 IEC 61672-1:2013 Class 2           STANDARDS         721 Models: ANSI S1.4-2014 Class 2, IEC 61672-1:2013 Class 1           Acoustic         ANSI S1.25-1991 IEC 61252:2017           Directive 2014/35/EU IEC 61252:2017         Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU	Battery Recharge	Qi Wireless, USB-C, or external 12 V	
Display off)   Time history: 1 s to 1 h   Measurement History: 1 min to 6 h	Typical Runtime (internal battery @ 22 °C)		
Measurement History: 1 min to 6 h	External Power		
Time above	Logging	,	
(Optional)  Signal Output  AC/DC on 3.5 mm TRS jack  Operating Temperature  -30 to 60 °C  10.1 x 3.3 x 1.3 inches 260 x 83 x 32 mm  Weight  12.1 oz (383 g)  FILTERS (OPTIONAL)  Bandwidth  1/1 and 1/3 Octaves  1/1: 8 Hz to 16 kHz 1/3: 6.3 Hz to 20 kHz  Standards Compliance  ANSI S1.11-2014 Class 1 IEC 61260:2014 Class 1 STANDARDS  721 Models: ANSI S1.4-2014 Class 2, IEC 61672-1:2013 Class 2  821 Models: ANSI S1.4-2014 Class 1, IEC 61672-1:2013 Class 1  Noise Dosimetry  ANSI S1.25-1991 IEC 61252:2017  Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU	Metrics		
Operating Temperature	1/1 and 1/3 Octave Metrics (Optional)	Leq, Lmax, Lmin	
Dimensions (H x W x D)  10.1 x 3.3 x 1.3 inches 260 x 83 x 32 mm  Weight  12.1 oz (383 g)  FILTERS (OPTIONAL)  Bandwidth  1/1 and 1/3 Octaves  1/1: 8 Hz to 16 kHz 1/3: 6.3 Hz to 20 kHz  ANSI \$1.11-2014 Class 1 IEC 61260:2014 Class 1 IEC 61260:2014 Class 1 STANDARDS  721 Models: ANSI \$1.4-2014 Class 2, IEC 61672-1:2013 Class 2 821 Models: ANSI \$1.4-2014 Class 1, IEC 61672-1:2013 Class 1 IEC 61672-1:2013 Class 1 ANSI \$1.25-1991 IEC 61252:2017  Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU	Signal Output	AC/DC on 3.5 mm TRS jack	
Dimensions (H x W x D)   260 x 83 x 32 mm	Operating Temperature	-30 to 60 °C	
Tell Composition   Tell Composition   Tell Composition	Dimensions (H x W x D)		
Bandwidth	Weight	12.1 oz (383 g)	
Till to 16 kHz	FILTERS (OPTIONAL)		
Trequencies (base 10)	Bandwidth	1/1 and 1/3 Octaves	
STANDARDS   IEC 61260:2014 Class 1	Frequencies (base 10)		
Acoustic  721 Models: ANSI S1.4-2014 Class 2, IEC 61672-1:2013 Class 2  821 Models: ANSI S1.4-2014 Class 1, IEC 61672-1:2013 Class 1  ANSI S1.25-1991 IEC 61252:2017  Directive 2014/35/EU Safety  721 Models: ANSI S1.4-2014 Class 2, IEC 61672-1:2013 Class 1  ANSI S1.25-1991 IEC 61252:2017  Directive 2011/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU	Standards Compliance		
Acoustic IEC 61672-1:2013 Class 2 821 Models: ANSI S1.4-2014 Class 1, IEC 61672-1:2013 Class 1  Noise Dosimetry ANSI S1.25-1991 IEC 61252:2017  Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU	STANDARDS		
IEC 61252:2017     Directive 2014/35/EU     Safety   IEC 61010-1:2010   RoHS Directive 2011/65/EU	Acoustic	IEC 61672-1:2013 Class 2 821 Models: ANSI S1.4-2014 Class 1,	
Safety IEC 61010-1:2010 RoHS Directive 2011/65/EU	Noise Dosimetry		
Approvals CE, RoHS, WEEE	Safety	IEC 61010-1:2010	
	Approvals	CE, RoHS, WEEE	

INCLUDED ACCESSORIES				
DESCRIPTION	MODEL			
Free-field Microphone (50 mV/Pa)	721 Models: 375A04 821 Models: 377B02			
Preamplifier	721 Models: PRM721 821 Models: PRM821			
USB-C Cable	CBL242-03			
Software	G4 LD Utility			

OPTIONAL ACCESSORIES				
DESCRIPTION	MODEL			
Replacement internal lithium batteries	BAT026			
Power cable with Anderson Powerpole® connectors to bare wires (6 in. / 15 cm)	CBL226-1/2			
External 12 V power cable for 721 and 821 of length 15 in. (38 cm). Terminated with Anderson Powerpole® connector	CBL241-01			
Universal AC power supply with USB-C output connector	PSA045			
Hard shell shipping and carrying case	CCS060			
Qi charger pad with USB-C connector	PSA046			
Tripod with low acoustic signature for use with Sound Level Meters. Max height 80 inches (2 m)	TRP025			
Accessory kit for Class 1 Sound Level Meters; includes case (CCS060), power supply (PSA045), Class1 calibrator (CAL200) & windscreen (WS001)	X21-ACC			
Accessory kit for Class 2 Sound Level Meters; includes case (CCS060), power supply (PSA045), Class 2 calibrator (CAL150) & windscreen (WS001)	X21-ACC1			
Option to add 1/1 and 1/3 Octave Band filters	X21-OB3			
Option to disable Bluetooth	X21-NBT			
8 GB, industrial grade microSD memory chip	X21-SD-8GB			
Preamplifier extension cables up to 200 ft. (60 m)	EXC series			



**Meter Ports** 

## **GMGA MEASURING**

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