LARSON DAVIS
A PCB DIVISION

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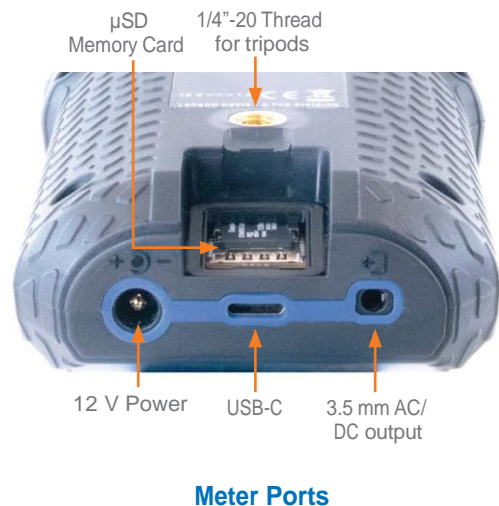
The Spartan Sound Level Meter Model 821 together with Larson Davis quality and customer support delivers a robust and reliable workplace noise measurement solution.

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	✓

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

SPECIFICATIONS

GENERAL

Dynamic Range (A-weighted typical)	17 to 140 dB
Time Weightings	Fast, Slow, & Impulse
Frequency Weightings	A, C, & Z
Data Storage (microSD card)	8 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) 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)

Bandwidth	1/1 and 1/3 Octaves
Frequencies (base 10)	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

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
Noise Dosimetry	ANSI S1.25-1991 IEC 61252:2017
Safety	Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU
Approvals	CE, RoHS, WEEE

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

µSD Memory Card — 1/4"-20 Thread for tripods — 12 V Power — USB-C — 3.5 mm AC/DC output