



Model 831-INT Docking Station

Compact Interface for All Accessories in a Noise Monitoring Station

Highlights

- 831-INT-ET adds Ethernet network connection for broadband communication
- Weather sensor interface
- Powered USB hub for communication, weather and GPS
- AC, battery or solar powered
- Battery charge management including solar power
- Power for Model 831, outdoor microphone weather sensor, and communication
- Fully supported by 831 SDK for system integrators
- Cabling made easy
- Rugged and reliable
- Live audio streaming
- -40 to 70 °C (-40 to 158 °F) Temperature range

Applications

- Permanent Noise Monitoring
- Temporary Noise Monitoring



Model 831-INT Docking Station



Model 831-INT seamlessly integrates the Model 831 with it's wide range of accessories

The Model 831-INT provides the 426A12 outdoor microphone with both electrical power and control commands for its electrostatic actuator, temperature and humidity readout. The Vaisala WXT520 (SEN031) weather sensor is connected to the Model 831-INT for wind speed and direction, temperature and humidity, barometric pressure, rain and hail.

The Model 831-INT further simplifies cabling by providing a USB hub where the GPS, analog modem or wireless gateway connect.

The AC power unit also controls the intelligent charging of the Sealed Lead Acid (SLA) backup batteries. The DC power input is available for solar powered installation.

The enhanced 831-INT-ET version extends the reach of the Noise Monitoring Station (NMS) with TCP/IP based broadband connection, even allowing live audio streaming. It is fully supported by the 831 SDK making it an ideal solution for system integrators.

Finally, the Model 831-INT hosts the Model 831 sound level meter as the heart of a permanent NMS.



Model 831 Interface

- Conditioning of signals from all sensors
- Power for Model 831
- Power and control signals for Models 426A12 outdoor microphone
- Power for 4 USB ports and logic I/O lines

4-Port USB Powered Hub

- Cellular Modem: MDMUSB-E
- Analog Modem: MDMUSB-A
- GPS unit: GPS001
- Combined weather sensor: SEN031
- Up to 500 mA per port

2 Digital I/O Lines

- 1 Logic Input, 0 - 5 V (Typical use: open door detection)
- 1 Logic Output, open drain, 0 - 16 V (Typical use: exceedance warning)
- Provides 10 to 15 V power port for external peripherals, up to 200 mA

Network (831-INT-ET)

- CAT5 Ethernet for broadband communication
- Wireless 3G/GSM-Raven XE Gateway

Miscellaneous

- Watchdog system will restart the system in the event of system faults
- Compact design cradles the Model 831 & provides for mounting in permanent enclosures
- LED Indicators show
 1. Mains Power
 2. Charger Status:
 - On = Full Charge Mode
 - Blink = Trickle/Recovery Mode
 - Off = Fully Charged
 3. System Power
 4. USB Hub Power

Battery Management and Charge Control

- One or two 12 V sealed lead-acid (SLA) batteries
- Connector: removable screw terminal
- Automatic system shutdown on low batteries
- Automatic intelligent charger for SLA batteries: trickle and full charge modes
- Temperature sensor for charger compensation

AC powered

- AC Power provided by 15 V 3.5 A: PSA030
- Seamless, automatic power switching from mains power to battery backup when mains power fails
- Automatic charge of backup batteries
- Automatic power up with mains power restoration, if battery was discharged

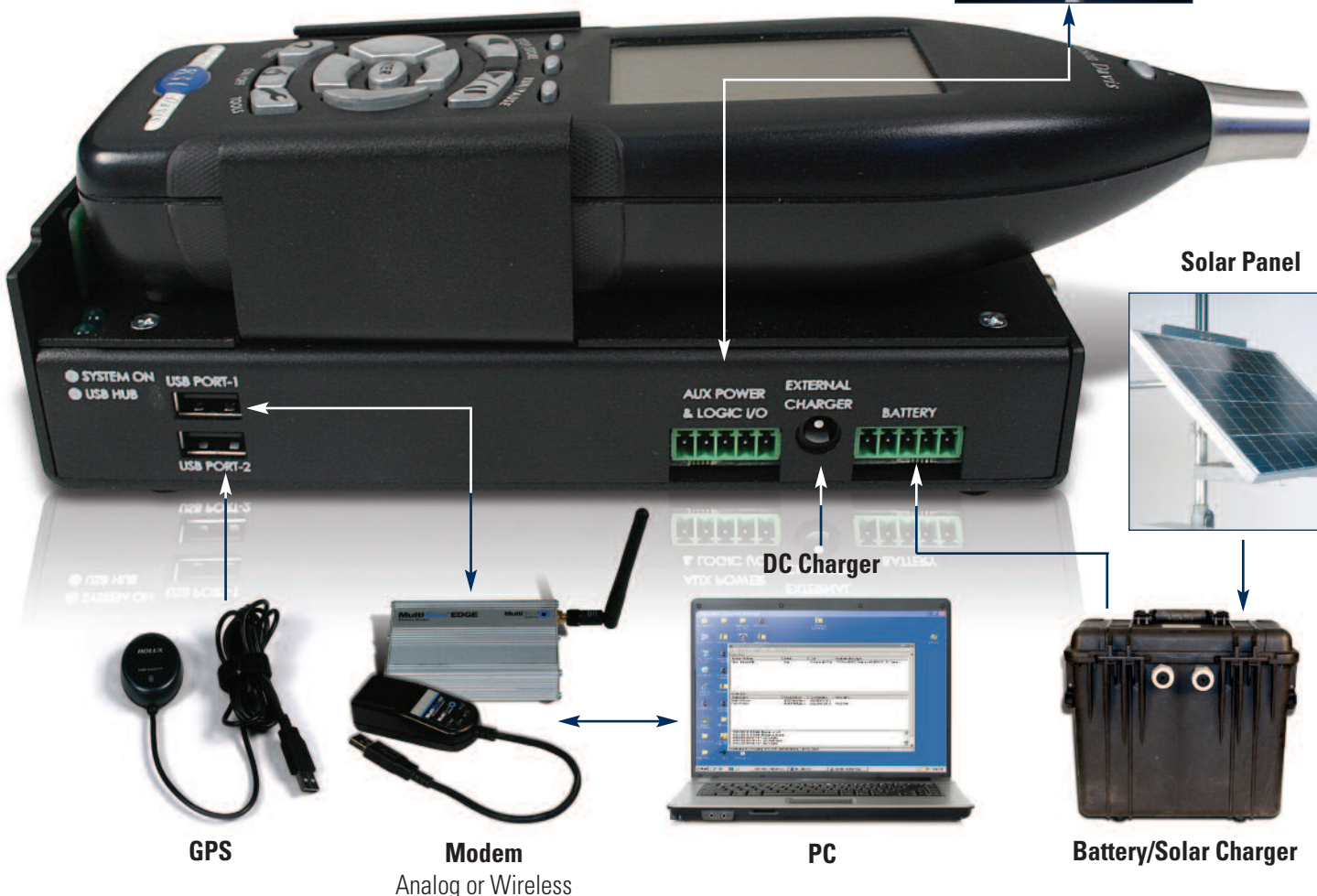
DC powered

- Powered from a battery and solar panel with matched charger
- Automatic power up after automatic shutdown

Alarm Event



Solar Panel

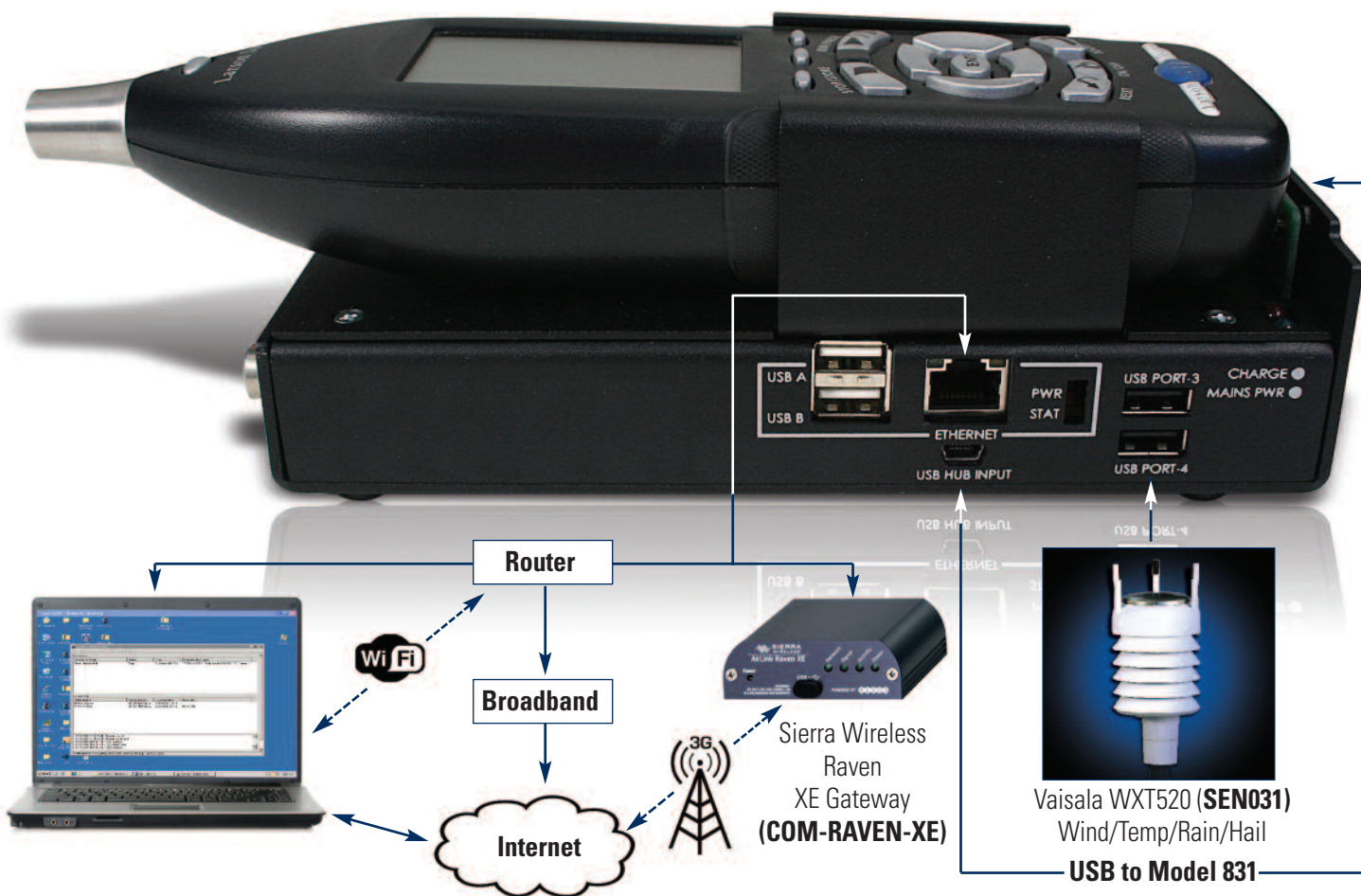
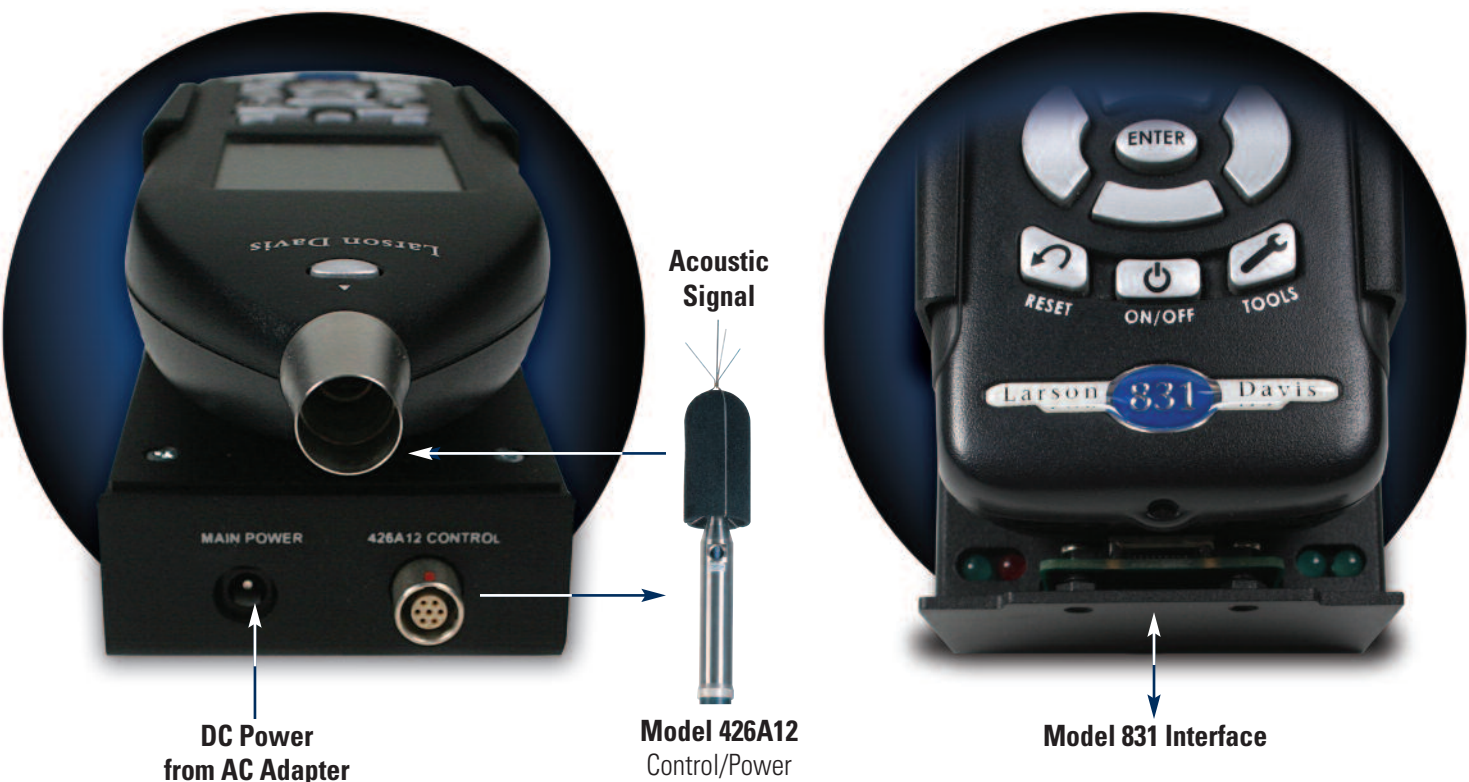


GPS

Modem
Analog or Wireless

PC

Battery/Solar Charger





Model 831-INT Docking Station



Specifications

Power	100-240 VAC, 50 or 60 Hz 12-16 VDC
Weight	831-INT 465 g (1 lb) 831-INT-ET 496 g (1.09 lb)
Size (L x W x H)	195 x 76.2 x 76.3 mm (7.68 x 3.00 x 3.02 in.)
Operating Temperature	-40 to 70 °C (-40 to 158 °F)
IEC61672	With Model 831 Type 1 Sound Level Meter

Ordering Information

831-INT	Model 831 Docking Station
831-INT-ET	Model 831 Docking Station with Ethernet

Included Accessories

PSA030	100-240 VAC, 50-60 Hz, IEC Connector Power Supply (3.3A at 15V)
CBL159	1.5 ft USB Cable

Optional Accessories

MDMUSB-A	Analog Modem
MDMUSB-E	Wireless Edge Gateway
GPS001	GPS Unit for Location and Clock
COM-RAVEN-XE	Sierra Wireless Raven XE Gateway
SEN031	Vaisala WXT520 Combined Meteorological Sensor
426A12	Permanent Outdoor Pre-amplifier / Microphone
EPS031	Fiberglass NMS Enclosure (AC power)
EPS032	Fiberglass NMS Enclosure (DC/solar power)

Optional Cables

CBL152	Acoustic Signal from Model 426A12 (20ft)
CBL153	Power and Control for Model 426A12 (20ft)
CBL167	Power and Data Cable for SEN031
DVX008A	USB to Serial Adaptor for RS232 Modem or CBL167

Optional Accessories



Model 831
Class 1 Sound Level Meter



Model 426A12
Permanent Outdoor
Microphone



Model EPS031/032
Fiberglass NMS
enclosure (AC/Solar power)



Model TRP019
20 ft tilt-down
pole



Model TRP020
20 ft heavy duty
tripod

LARSON DAVIS

A PCB PIEZOTRONICS DIV.

3425 Walden Avenue, Depew, NY 14043-2495 USA

Phone 716-926-8243

Toll-Free in USA 888-258-3222

Fax 716-926-8215 E-mail sales@larsondavis.com

Web Site www.larsondavis.com

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