

# pulsar nova®

## La Nuova Generazione di Fonometri Integratori



 **pulsar**  
Instruments Plc

Industrial, Occupational and Environmental noise measurement products.

# Modello 43 (Integratore di Classe 1)

Strumento conforme alle misure in ambito D.L.81/2008 e alla Normativa Macchine



## CARATTERISTICHE

- **Dinamica 120 db**  
Gamma dinamica da 20 dB A a 140 dB A e 143dB C, impendendo il verificarsi di Overload e Underange
- **Display a colori**  
di grandi dimensioni ad alta definizione OLED antiriflesso
- **Misura simultanea dei parametri chiave**
  - LAF, LAeq, LAFmax e Lcpea
  - F Fast, S Slow e I Impulse
  - RMS & Picco: A, C e Z
- **Misura di Leq, Peak e C-A**  
per il calcolo con il metodo HML per i DPI
- **Grande Durata delle Batterie**  
50 ore con batterie al litio tipo AA
- **Datalogger Intergrato**
- **Software AnalyzerPlus**  
che consente di trasformare facilmente le vostre misure in relazioni tecniche
- **7 anni di Garanzia**

La nuova gamma di fonometri Nova Pulsar combina con successo tecnologia e avanzati metodi di misurazione del rumore. Nova risulta adatto anche per i non esperti di acustica per la sua semplicità di utilizzo oltre ad essere configurabile secondo le proprie specifiche esigenze.

## ALTRE SPECIFICHE

- Possibilità di selezionare la ponderazione di frequenza tra A, C o Z
- Possibilità di selezionare la ponderazione temporale tra FAST, SLOW ed IMPULSE
- Design intuitivo per consentire una navigazione del menu veloce e semplice
- Struttura robusta in metallo
- Peso: 440 gr.
- Misure: 280 x 80 x 42 mm
- Connessione SB Mini-b to PC

## Configurazioni tipiche:

- **MODELLO 43K-DL**
- **MODELLO 43K-DL-OB (Banda Ottava)**

- Conforme alla norme

**IEC 61672-1:2002, IEC 60651:2001, IEC 60804:2000, IEC 61252: 1993**

Distribuito da:  
Zetalab s.r.l.

**Zetalab**

## General

### Accuracy

Class 1 – Model 41, Model 43, Model 45  
Class 2 – Model 42, Model 44, Model 46

### Applicable Standards

IEC 61672-1:2002 Class 1 or Class 2, Group X  
IEC 60651:2001 Type 1 I or Type 2 I  
IEC 60804:2000 Type 1 or Type 2  
IEC 61252:1993 Personal Sound Exposure Meters  
ANSI S1.4 - 1983 (R2006), ANSI S1.43 - 1997 (R2007)  
ANSI S1.25:1991  
1:1 Octave Band Filters to IEC 61260 & ANSI S1.11-2004

### Microphone

Class 1 PM1 pre-polarized  
Class 2 PM2 pre-polarized

### Microphone Preamplifier

PA40 Removable Preamplifier

### Measurement Range

20dB - 140dB RMS Single Range (143dB peak)

### Noise Floor

<18dB(A) Class 1, <21dB(A) Class 2

### Time Weightings

'F' (Fast), 'S' (Slow) & 'I' (Impulse) all measured simultaneously

### Frequency Weightings

RMS & Peak: A, C, & Z (un-weighted) all measured simultaneously

### Frequency Bands

10 1:1 Octave Bands: 31.5Hz to 16kHz

### Integrators

Three simultaneously measuring "virtual" noise meters.

Integrator 1 is preset to Q3 for Leq functions.

Integrators 2 & 3 can be configured with the following:

Exchange Rate: 3, 4 or 5dB

Threshold: 70dB to 120dB (1dB steps)

Time Weighting: None or Slow

Criterion Level: 70dB to 120dB (1dB steps)

Criterion Time: 1 to 12 hours in 1 hour steps

### Integrator Quick settings (pre-set)

EU, OSHA HC & OSHA NC, OSHA HC & ACGIH, MSHA HC & MSHA EC, Custom 1 & Custom 2

### Ln Statistical Values

14 independent statistical Ln values calculated from 1/16th LAF

7 are preset to L1.0, L5.0, L10.0, L50.0, L90.0, L95.0 & L99.0

7 user defined Ln values

### Time History Data Rates (Global settings)

10ms, 62.5ms, 125ms, 250ms, 1/2 sec, 1 sec, 2 sec (user selectable)

### Language options

English, French, German, Italian, Spanish as standard

NB. Other language options will be available.

## Physical

### Batteries

6 x AA

### Battery life

Typically 30 hours with Alkaline AA  
Typically 50 hours with Lithium AA  
Rechargeable battery life is dependent upon the battery type and screen brightness

### External power

5v-15v via Multipin I/O socket

### Weight

440g without batteries

### Size

280mm x 80mm x 42mm with preamp and microphone

### Connections

USB 2.0 Mini-B to PC  
AC output via 3.5mm Stereo jack  
AC & DC output via Multipin I/O socket

### Tripod Mount

1/4" Whitworth socket

### Case

Die cast aluminium with silicon elastomer

keypad and soft touch back

### Display

High resolution anti-glare OLED display  
Ambient light sensor

Illuminated keypad

### Supplied Accessories

Windshield, Wrist Strap, USB Download Cable, AnalyzerPlus software, AA Batteries

## Conformance, Logging & Storage

### Conformance

**Environmental**  
Operating Temperature: -10°C to +50°C  
Storage Temperature: -20°C to +60°C  
Humidity: Up to 95% RH Non-Condensing

### Electromagnetic performance

IEC 61672-1:2002 & IEC 61672-2:2003

Except where modified by EN 61000-6-1:2007 & EN 61000-6-1:2007

### Logging and Storage

#### Memory

4GB removable memory card

#### Audio Note Recording

A spoken note (up to 30 seconds) attached to measurements

### Audio Recording

Manual recording  
User options:  
Studio quality - 96kHz/32bit WAV format  
Standard quality - 16kHz/16bit WAV format

### Measurement Control

The unit can be set to record and store data over fixed times of:  
1 min, 5 min, 10 min, 15 min, 30 mins, 1 hour, Lden (Day, Evening, Night)  
Automatic Synchronisation & Repeat options  
Pause  
Back Erase with user selectable duration (via AnalyzerPlus software)

## Model Specific Measurement Parameters

### Standard Measurement Parameters Model 41 & Model 42:

Lxy, Lxy Max, Lxy Min

Time, date & duration of measurement

Extra measurement and stored functions available.

### Standard Measurement Parameters Model 43 & Model 44:

Lxy, Lxy Max, Lxy Min

Lxq, LCPeak, LZPeak, LAPeak LCeq-LAeq, LxEx, LAleq

Graph of Short LAeq, LCPeak

Time, date & duration of measurement

Extra measurement and stored functions available.

### Standard Measurement Parameters Model 45 & Model 46:

Lxy, Lxy Max, Lxy Min

Lxq, LCPeak, LZPeak, LAPeak LCeq-LAeq, LxEx, LAleqT

Graph of Short LAeq, LCPeak

Measurement Run Time

Integrators 2 & 3: TWA, Dose %, Est Dose %

Real-Time 1:1 Octave Bands (Graphical & Numeric)

14 Statistical Values (Ln)

### Stored Parameters - Model 45 & Model 46

LxyMax & Time History of LxyMax

LAeq, LCeq, LZeq, LCPeak, LZPeak, LAPeak, LAleq

Time History of LAeq, LCeq, LZeq, LCPeak, LZPeak, LAPeak, LAleq

Integrators 2 & 3: LAVG, TWA, % Dose

Time History of LAVG

1:1 Octave Bands: Overall Leq & Leq Time

History for each band

Ln Values: 14 independent statistical values

Audio recording during measurement

Time, date & duration of measurement

Where x means the three frequency weightings A, C and Z and y means the three time weightings 'S' (Slow), 'F' (Fast) and 'I' (Impulse). All weightings simultaneously measured where appropriate.

Other functions may be calculated by the AnalyzerPlus software.

## Useful Information

### Input & Output Cables

PSR101 - Nova 1m Mini-B to Type A USB Cable  
PSR171 - Nova power input cable, 2.1mm Power Jack, 2m  
PSR174 - Nova AC & DC Output, 18 way to 2 x Phono, 1m  
PSR176 - Nova 12v Battery pack cable 2m to tinned ends with inline fuse  
PSR177 - Nova AC output cable, 3.5mm Mono to 3.5mm Stereo Jack, 2m  
PSR185 - Nova AC output cable, 18 way to Phono, 1m  
PSR190 - Nova power input cable, 2.1mm Power Jack & mains power supply

### Software

AnalyzerPlus Download, Configuration & Analysis software supplied as standard.  
Compatible with Microsoft Windows XP, Vista, 7 (32bit & 64bit) & 8 (32bit & 64bit)

### Ordering Codes

Sound Level Meter and Measurement Kit

Model 41: PSR-41

Model 41 Kit: PSR-41K

Model 42: PSR-42

Model 42 Kit: PSR-42K

Model 43: PSR-43

Model 43 Kit: PSR-43K

Model 44: PSR-44

Model 44 Kit: PSR-44K

Model 45: PSR-45

Model 45 Kit: PSR-45K

Model 46: PSR-46

Model 46 Kit: PSR-46K

### Measurement Kits

Instruments can be supplied as a complete measurement kit to ensure that you have all the accessories necessary to perform your noise survey.

The Nova noise measurement kit contains: Sound Level Meter, Acoustic Calibrator, Windshield, Kit case, Wrist Strap, AnalyzerPlus Software, USB Download Cable, Batteries, Operating Manuals, Calibration Certificates & 7 year Warranty.

### Options Ordering Codes - Model 41 & Model 42

PSR0110 - Data Logging

PSR0111 - Manual audio record & Data

Logging

PSR0112 - Audio Note & Data Logging

PSR0113 - Repeat Timer & Data Logging

PSR012 - Single Timer

PSR013 - Leq/Peak & C-A

PSR014 - Pause / Back erase

PSR015 - TWA/ dose

PSR016 - Ln Values

PSR017 - Real Time 1:1 octave band filters

### Options Ordering Codes - Model 43 & Model 44

PSR0110 - Data Logging

PSR0111 - Manual audio record & Data

Logging

PSR0112 - Audio Note & Data Logging

PSR0113 - Repeat Timer & Data Logging

PSR012 - Single Timer

PSR015 - TWA/dose

PSR016 - Ln Values

PSR017 - Real Time 1:1 octave band filters

Notes: All specifications, features and values are subject to change.

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