NM30/60/61/62/63/64/65/61R

Noise Monitor

Figure 1 - Noise Monitor

User Manual   VOLUME 1.5

DocNo: NM30NM60V1.5

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1. Introduction

About this manual

This manual was prepared to aid the engineer in the configuration, setup and implementation of the NM30/60 with easy to understand terms and procedures.

About the Noise Monitor

The NM30/NM60 is a sophisticated noise monitoring device available for the monitoring of noisy environments, or where noise trending is required.
- NM30 – 300mm Noise monitor
- NM30W – 300mm Noise monitor with Web Service
- NM60 – 600mm Noise monitor
- NM60W – 600mm Noise monitor with Web Service
- NM61 – Remote Noise sensor
- NM62 - Remote Noise Sensor with Relays
- NM63 - Remote Noise Sensor with Siren/Buzzer)
- NM63R - Remote Noise Sensor with Siren/Buzzer and Relays out
- NM64 - Remote Noise Sensor with level Relays
- NM61R - Standalone Remote Noise Sensor with Relay Contacts
- NM65 - Remote Noise Sensor with 485 Communication

The NM30/60 has the following features

- Up to 5 Remote noise sensors
- Wireless connection up to 100M between Remote Noise Sensors and Noise Monitor
- Flashing Red Headphones indicating Hearing protection is to be worn
- Customisable warning levels
- Method of measurement - Equivalent continuous A-weighted sound pressure level LAeq
- 8 – hour Time Weighted Averages(TWA) – are an average value of exposure over the course of an 8 hour work shift

The NM30W/60W has the following features

All the same features as the NM30/NM60 with the addition of

- GSM device
- 24 Month Data for the GSM Device
- 24 Month Access to the Monitoring Web page

The NM61R has the following features

- 3 x potential free 6A relay outputs
- Customisable warning level switching all three relays
- Standalone operation without Noise sign

The NM62 has the following features

- 1 x potential free 6A relay outputs
- Customisable warning level

The NM63 has the following features

- 95dB siren connected to pulse a warning signal
- Customisable warning levels

The NM64 has the following features

- 3 x potential free 6A relay outputs
- Customisable warning level
- Default levels
    - o 70< Noise <85 Relay1
    - o 85< Noise <90 Relay 2
    - o 90< Noise Relay 3

The NM65 has the following features

- RS485 Communication

2. Warranty

The NM30/NM60 and NM61 carries a one year limited warranty on all parts and labour.
(Full warranty details available on request)

3. Safety information

Dangerous voltages can occur on the connectors, even if the auxiliary voltage has been disconnected.

Only a certified electrician is allowed to carry out the electrical installation.
Breaking the seal on device will result in loss of warranty.
Electrical safety regulations must always be followed.

The unit is sealed during the production process and should under no circumstances be opened.

4. NM30/60/61 Connections

Noise Monitor (NM30, NM60):
- The Noise Monitor requires a 115/230Vac supply

Remote Noise Sensor (NM61/NM63):
- The Remote Noise Sensor requires a 115/230Vac supply

Remote Noise Sensor with Relays (NM61R/NM62/NM64):
- The Remote Noise Sensor requires 115/230Vac supply
- The Remote Noise Sensor has Com and NO potential free contacts

Remote Noise Sensor with Relays (NM65):
- The Remote Noise Sensor requires 115/230Vac supply
- The Remote Noise sensor has an additional RS485 cable for the Modbus RTU communication
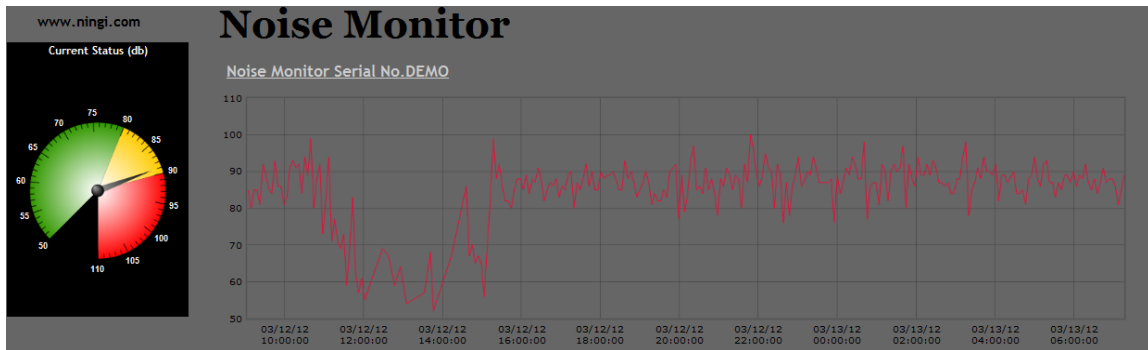
5. Communication

The noise monitor receives data wireless from up to five remote noise sensors via 802.15.4. If the noise level at any of the remote sensors exceeds the noise warning level (default 85dB) the red hearing protection indication will activate on the noise monitor. If the noise monitor is fitted with a GSM upload module, the noise levels will be uploaded to the remote server. Data on the remote server is available from anywhere in the world via internet.

The demo is available at

https://techconnect.us-dc.com/daq/login.do

Username: demo@noise.com
Password: demo

RM61R – Communication via RS485 for settings only.

NM65 Registers

Register	Description	Values	Unit
30001	Counter	0-255	
30002	Noise Level	50-110	dBA

6. Ordering information

Part no.	Description
NM30	Noise Monitor 300mm
NM30W	Noise Monitor 300 & 24Month Web services
NM60	Noise Monitor 600mm
NM60W	Noise Monitor 600 & 24Month Web services
NM61	Remote Noise Sensor – IP65
NM61R	Standalone Remote Noise Sensor with Relay
NM62	Remote Noise Sensor with Relay output
NM63	Remote Noise Sensor with Siren
NM64	Remote Noise Sensor with 3 level relays
NM65	Remote Noise Sensor with RS485 Modbus RTU

7. Electrical specifications

	Min	Typical	Max	Unit
Operating voltage	100	115/230	240	Vac
Power consumption		3	5	W
Communication channel 802.15.4 (MODBUS RTU)		9600		Bps
Relay contacts AC Voltage			250	VAC
Relay contacts DC Voltage			30	VDC
Relay contacts Current Rating (NM61R x3) (NM62 x1)			6	A

8. Terms and conditions

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