

New-signal / First-signal and Process Indicator System NEMS 16

Contactor voltage 15V DC...30V DC

TÜV type approval for absence of reaction



an innovation out of

- product family



HIGH OPERATIONAL RELIABILITY AND INTERFERENCE IMMUNITY

- 16 separate fault / process indicator inputs
- microprocessor controlled
- interference suppression filter for each input
- interfering voltage immunity acc. to DIN-IEC 0801-4
- electrically isolated inputs
- electrically isolated mains power supply
- network alarm system by LAMTEC SYSTEM BUS.
Up to 64 NEMS-16 devices can be connected together (1024 signal inputs).

LOW INSTALLATION COSTS

- For panel mounting with fixing clamps at the side
- Pluggable terminal blocks at the back plane

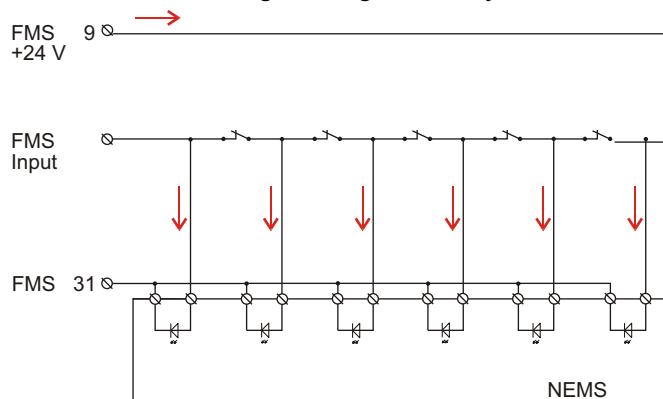
INDICATOR FUNCTION

- First-/ new value message
- Resolution 1...127ms
- LED Mirror function
- Contact chatter rejection
- Classification of alarms via groups

INPUTS individually configurable

- 16 alarm inputs, which can be connected with normally open/close contacts 15V DC...30V DC
- Fault / indicator function
- Open-circuit current / closed current function
- Inputs can be controlled virtual by LAMTEC SYSTEM-BUS
- Bypass function
- Activation delay time 0...1h49min
- External acknowledgement possible
- Inputs are reactionless, proofed by TÜV Süddeutschland (Report No. C1125 00/03)
- Through the absence of reaction of the inputs, safety interlock circuits (24 VDC) can be connected and monitored

Example: Connecting safety interlock circuits of the FMS Firing-Management-System



LED-INDICATION

- 1 LED (green) = main power "ON"
- 16 LEDs, two colours (red) first value = rapid flashing LED
new value = slow flashing LED
(green) process indication = steady light, ON/OFF

INSCRIPTION

- White card strip with clip, for insertion in the front plastic film pocket

COMMUNICATION INTERFACES

- Optional RS 232 or RS 485 by additional module
- LAMTEC SYSTEM BUS (LSB)
- Optional Fieldbus (Profibus, Modbus, Interbus, CANopen)

RELAY OUTPUT

- Two separate relays, each with one isolated contact (SPDT), individually programmable

BUILT-IN BUTTONS

- EQ = Cancels first value signal
- NQ = Cancels new value signal
- HQ = Cancels hooter
- LP = Lamp (LED) test

CLEAR TEXT OUTPUT MESSAGES

Clear text messages on display of

- FMS and ETAMATIC
- Display- and control terminal
- Printer

POWER SUPPLY

- 24 V DC +/-10% DC/DC-Wandler converter, isolated, power consumption max. 5W
- 110...240 V AC, 50/60Hz, AC current input max. 150mA

HOUSING

- Black sheet steel, size 72 x 144 x 200 mm for instruments panel mounting.
Panel cutout, size 138 x 68 mm
Total weight ca. 1,1 kg
Protection class IP40 at the front (optional IP54)
- Other versions
Wall mounting case
19"-rack for alarm panel built-in in a control cabinet

NEMS 16 software for configuration and text entries

This software can be used to programm comfortable all channel input functions

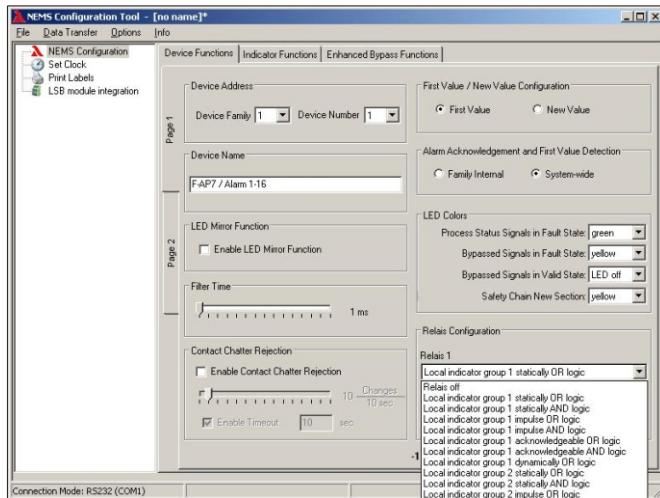


Illustration 1: NEMS 16 system configuration

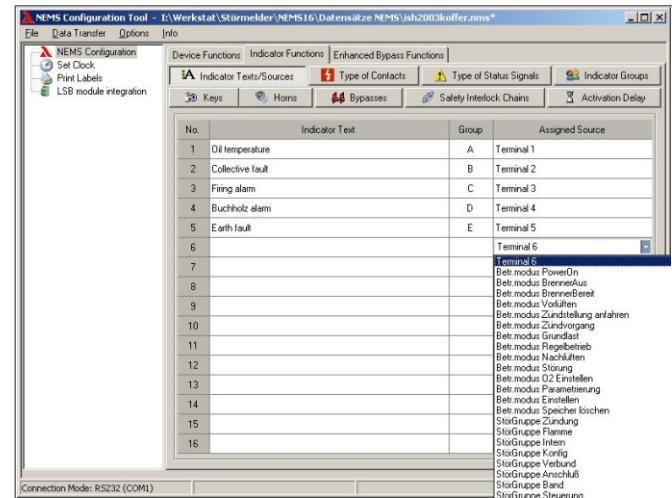


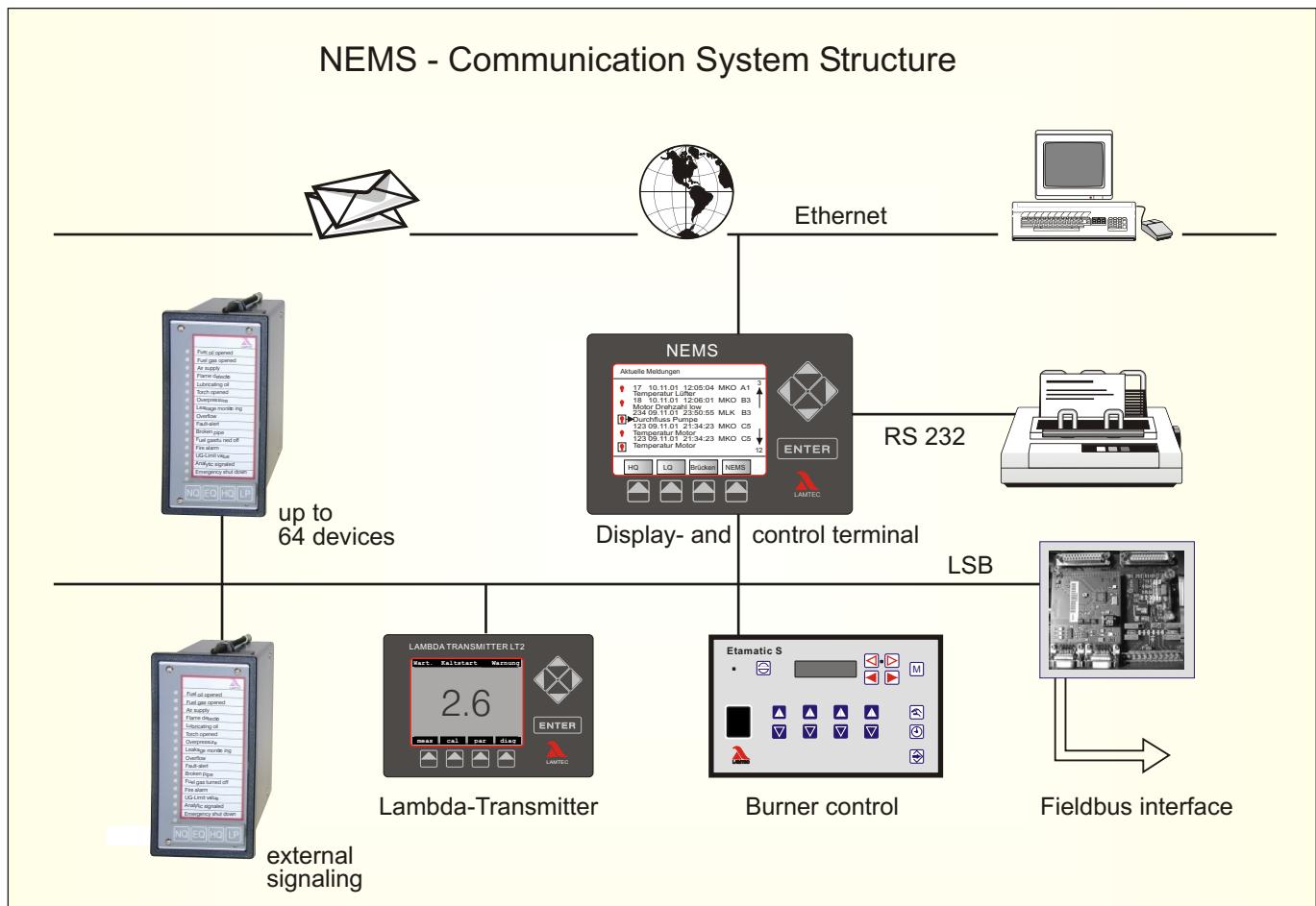
Illustration 2: Channel configuration

NEMS 16 in use with the firing technology

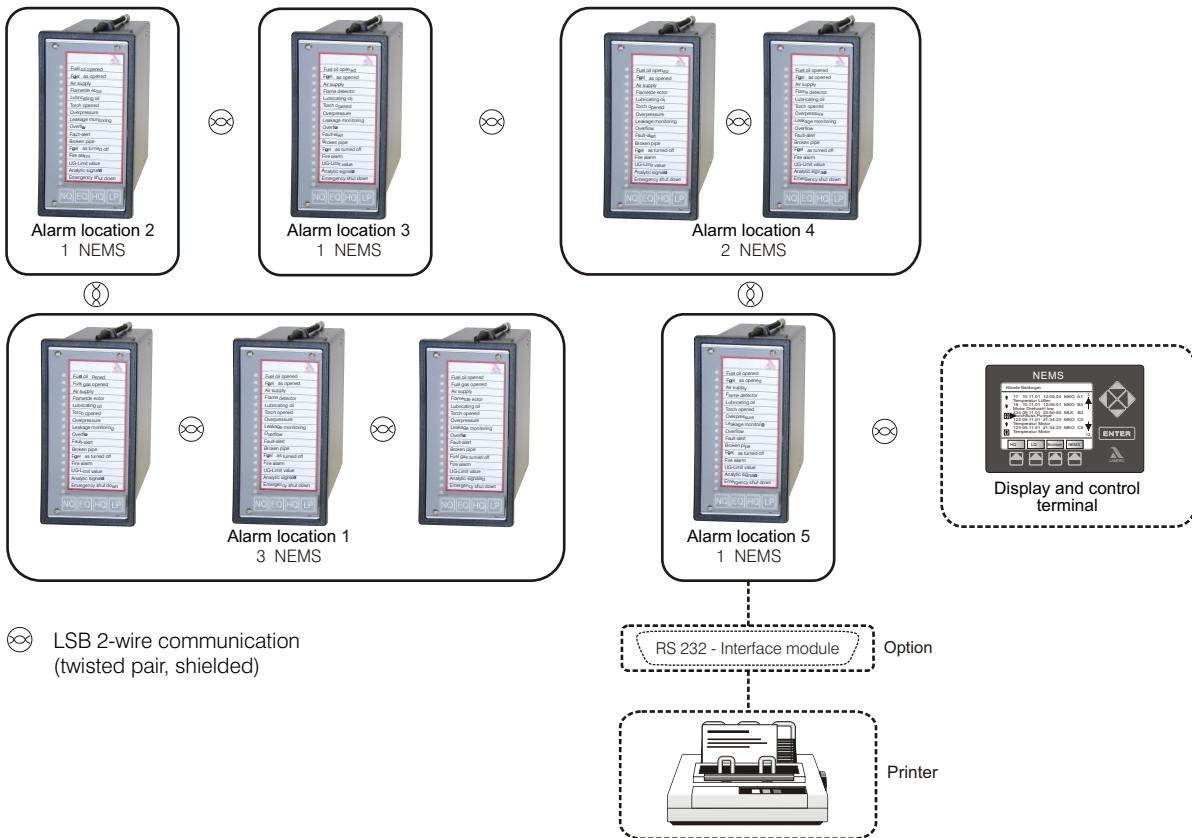
The NEMS 16 devices are prepared to interface the LAMTEC SYSTEM BUS (LSB) for communication with VMS/FMS and ETAMATIC. Through this connection and communication it is possible to combine burner controls and corresponding safety interlock circuits together with

the very good visualization and comfortable manual handling.

The optional used display and manual keypad-terminal with graphic LCD-display offers the full NEMS 16 system access.



NEMS 16 network application via LAMTEC SYSTEM BUS (LSB)



Description/Type	Item no.
NEMS 16 230 V AC without RS232 Interface	in panel mounting case IP40 680R1000
NEMS 16 230 V AC with RS232 Interface	in panel mounting case IP40, incl. configuration software 680R1001
NEMS 16 24 V DC without RS232 Interface	in panel mounting case IP40 680R1010
NEMS 16 24 V DC with RS232 Interface	in panel mounting case IP40, incl. configuration software 680R1011
Option protection class IP54	in panel mounting case 680R1013
PC configuration software for NEMS 16, for text entry and configuration premium version (incl. LSB/USB-Adapter for programming of complete networking NEMS 16 systems)	680R1052
PC configuration software for NEMS 16, for text entry and configuration standard version (only single NEMS 16 programmable and used for NEMS 16 with RS 232 Interface)	680R1053
PC configuration software for NEMS for text input and configuration (incl. LSB/USB converter, for configuration of max. 2 stand-alone NEMS without RS232 interface)	680R1056
Display- and control terminal for NEMS	on request
Transistorized 3-fold horn, 230 V AC	LH4/OK-230
Transistorized 3-fold horn, 24 V DC	LH4/OK-24
Thermal printer with winding device, 82 characters per line, RS 232 Interface, panel mounting, in panel mounting case 24 V DC	680R1070
Thermal printer 6HE, incl.winding device, RS232, 24VDC, for 6HE mounting	680R1090
GPS tuner GPS 1645&PSx&DHS, incl. antenna, 2 connecting cables and level converter	680R1037
LSB output module with 4 digital outputs, floating, to indicate global indicator groups A...Z	663R4027
LSB output module with 4 digital outputs, floating, to indicate NEMS group alarms	663R4027AL
Fieldbus connection - PROFIBUS DP	663R040-PB/NE
Fieldbus connection - MODBUS with SUB/D/RS232 (RTU)	663R040-3MBD/NE
Fieldbus connection - MODBUS with terminals (RTU)	663R040-3MBK/NE