

NEV 300 LSN power supply



- Can be connected to all LSN control panels (centralized or decentralized)
- ► A maximum of two 12 V/18 Ah batteries can be used
- Monitoring of line and battery voltage
- ► Tamper protection (tamper contact)
- > 3 freely configurable open collector outputs
- ► Slot for optional voltage converter (to 28 V)
- VdS class C
- ► DIN EN 50131-1, DIN EN 50131-6

The NEV 300 LSN is an additional power supply for LSN control panels.

The power supply is a separate LSN element and is programmed from the control panel with the corresponding program.

Message types such as tampering with tamper contacts and power supply or battery faults are transmitted to the control panel via LSN.

The NEV 300 LSN consists of a housing incl. 12 V / 4.0 A power supply unit. Maximum of two 12 V / 18 Ah batteries can be used.

System Overview

This additional power supply for LSN control panels is connected to the LSN local security network in an LSN loop or in up to two LSN stubs.

Connection is made centrally (directly next to the control panel) or decentrally (remotely).



- 1 LSN control panel
- 2 NEV 300 LSN power supply
- 3 Connection in an LSN loop or in up to two LSN stubs

Functions

- Control assembly with 230 V power supply, power failure protection, transformer connection, rectifier, battery charge control and monitoring, battery check, surge protection, malfunction detection and display
- Connector board with connection to the LSN lines with power supply, battery connection, connection to external consumers, slot for 28 V voltage converter, fuses for voltage outputs, three open-collector outputs (C points), two relay modules can be plugged in if needed

- The battery charge voltage is set at the factory. The
 controller and the internal temperature sensor ensure
 temperature-adjusted battery charging. A remote PTK
 tracker can be used if needed. Should readjustment be
 necessary, this is carried out via a potentiometer on the
 control assembly.
- The battery monitor identifies when voltage falls below the discharge level, or when there is an interruption or short-circuit of the battery cable. The test cycle can be set to 1 min. or 15 mins. The battery load test lasts for 2 seconds and is switched off if the regulator is inoperative (power failure).
- Device display: The display visible from the outside contains the operating indicator (green LED) that is lit when the battery and/or 230 V is connected, and the power supply failure indicator (yellow LED) that is lit when a battery and/or power supply fault occurs.

Certifications and Approvals

Region	Certification	
Germany	VdS	G 103030, C NEV 300 LSN
Europe	CE	NEV 300 LSN

Installation/Configuration Notes

General notes

- The energy balance is determined according to VDE 0833 and created using the "uezpro" planning and current calculation program.
- The LSN a/b line current, max. 100 mA, is supplied by the control panel.
- The NEV 300 LSN can be operated directly next to the control panel (centralized) or remotely (decentralized).
- Installation cable for LSN technology: J-Y(St)Y
- Shielding (drain wire) must be routed to the ground connectors for each LSN line. There must be no connection between the housing potential and the LSN cable shielding.

VdS regulations

- Only one power cable can be connected to the "L" and "N" network connection terminals.
- Ensure that the varistor already installed (surge protection) is connected to the second connection terminal.
- All connection lines from the control assembly and batteries to the connector board must be routed via the supplied split ferrite sleeve, as described in the installation manual.
- Ensure that the "+U" and "OV" power supply connectors are not linked to the connected intrusion control panel.
- The device is suitable for use in intrusion alarm systems in accordance with DIN EN 50131-1.

Voltage converter 28 V (optional)

The basic voltage of the power supply is 12 V. If the voltage drop is too high due to cable length, a $28\,V$ voltage converter (optional) can be plugged into the connector board. $28\,V$ for $2\,x$ +U/0 V and $1\,x$ user output as needed. Power intake for the three outputs totals $500\,\text{mA}$.

TRN panel relay module (optional)

Panel module with two relays for zero potential outputs, one switching contact per relay. Up to two units can be plugged into the connector board.

Parts Included

Туре	Qty.	Component
NEV 300 LSN	1	Housing, control assembly, connector board and cable set without batteries

Technical Specifications	
Transformers	

Surge suppression

Transformers				
•	Protection class	I (DIN VDE 0106 Part 1)		
•	Line voltage	230 V (+10% to -15%)		
•	Line frequency	50 Hz		
LSN technology				
•	Supply voltage	+15 V to +31 V		
•	Current consumption	max. 3.85 mA		
Cont	rol unit			
•	Battery charge voltage	From 0 °C to 50 °C according to the battery charge discharge characteristics (factory setting: 13.8 V at 20 °C)		
•	Battery charge	Bk/20 at 36 Ah = 1.8 A		
•	Battery capacity	12 V/2 x 18 Ah		
•	Power output	Corresponds to battery charge voltage		
•	Output current (battery charge current + user current)	. , , ,		
• Curre	Output current (battery charge current + user cur-	age Max. 4.0 A		
Curre	Output current (battery charge current + user current)	age Max. 4.0 A		
Curre	Output current (battery charge current + user current) ent available on connector boar	age Max. 4.0 A d max. 2.3 A		
Curre	Output current (battery charge current + user current) ent available on connector board + U/0 V and external users	age Max. 4.0 A d max. 2.3 A		
Curre	Output current (battery charge current + user current) ent available on connector boar + U/O V and external users With bridging time of 60 hrs	age Max. 4.0 A d max. 2.3 A < 600 mA < 1.2 A		
•	Output current (battery charge current + user current) ent available on connector board + U/O V and external users With bridging time of 60 hrs With bridging time of 30 hrs Current available at 28 V from connector board (+U/O V and	age Max. 4.0 A d max. 2.3 A < 600 mA < 1.2 A		

> 5.5 A

Monit	toring	
•	Network fault	< 130 V
•	Battery malfunction (discharge battery)	≤ 10.5 V
•	Total battery discharge protector (TES)	< 10 V
Switc	ch outputs (C points)	
•	Principle	Open collector (short-circuit resistant)
•	Max. voltage	10 V to 30 V
•	Maximum current	300 mA
Volta	ge converter 28 V (optional)	
•	Load current	Max. 500 mA in total
•	Load current in the event of power failure with a bridging time of 72 hours	200 mA in total when two 12 V/18 Al batteries are available
Elect	romagnetic compatibility (EMC	3)
•	Interference immunity	DIN EN 50130-4
•	Interference emissions	DIN EN 50081-1
Envir	onmental conditions	
•	ambient temp. (in operation)	- 5° C to + 45° C
•	Storage and transport temperature	- 25° C to + 70° C
•	Environmental class	II (VdS 2110)
Hous	ing protection type	IP 30
Humidity		+ 40 °C, 93% rel. humidity
Enclo	sure	
•	Dimensions (H x W x D)	460 x 380 x 97 mm
•	Color	Light gray / RAL 7035
Weigl	ht (without batteries/with bat-	2 kg/15 kg

teries)

Ordering Information

NEV 300 LSN power supply

4998111983

For additional power supply to LSN control panels, housing incl. $12\,\text{V}/4.0\,\text{A}$ power supply unit, a maximum of two $12\,\text{V}/18\,\text{Ah}$ batteries can be used.

Accessories

TRN panel relay module

ICP-TRN

With 2 relays, one switching contact per relay for zero potential outputs

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