

### **NPA Series**



Illustration similar

#### **Features and Functions**

- Decentralized PA unit controlled by the INTRON-D plus over Ethernet/IP
- Exchangeable amplifier modules allow for a maximum output power of 600 W
- Can process up to 4 simultaneous and independent audio channels
- Up to 8 integrated, selectively addressable speaker circuits
- Integrated speaker monitoring
- Simplicity of system design: NPA can be placed anywhere on the LAN
- Intelligent backup control
- Integrated web interface

The multi-channel, IP-based PA unit of the NPA series is used to control up to 8 selectively addressable speaker circuits. Via Ethernet / IP network, the decentralized unit can be connected to the INTRON-D *plus* communication and public address system from INDUSTRONIC and can be operated within a network of systems.

Via the integrated speaker monitoring system there is the option to continuously monitor speaker circuits for short-circuit, earth leakage, line interruption, and impedance changes.

Navigate through the intuitive user interface, implemented in the LCD display, using the 4 function keys. Utilize the integrated web interface and define settings via a standard web browser installed on a PC.

The intelligent backup control offers unlimited possibilities. Depending on your requirements, the power supply unit or individual amplifier modules can be configured according to the N+1 redundancy principle, all in one device. It's also possible to operate the entire NPA unit redundantly. As an option, you can use the ring topology for speaker circuits.

The modular design of the NPA allows for a maximum output power of 600 W. The two amplifier slots provided in the NPA unit can be equipped with amplifier modules that are available in two different output power versions: 2 x 150 W and 1 x 300 W. They can be configured in any combination and swapped or added to at a later date due to the simplicity of the configuration interface.



#### **Other Features**

- Easy-to-use via LCD display and function keys on the front panel
- N+1 redundancy can be defined for the power supply unit, the amplifier module, or the NPA unit as a whole
- Interface to connect external expansion modules
- Great diversity, as you can combine different amplifier modules that can be individually plugged into the amplifier slots
- Easy-to-service easily exchange the power supply unit, and the amplifier modules
- 1 separate analog AF input with controllable push-to-talk control input
- 1 independent analog AF input with 0 dB level input for entertainment functions
- 1 fault message output
- 4 independent open collector outputs (e.g. as mandatory call output)

#### **Electrical Data**

AC supply voltage	100 VAC to 276 VAC
DC supply voltage	42 VDC to 72 VDC
Frequency response	150 Hz to 16 kHz (+/-3 dB)
Efficiency	> 80 %
Power frequency	47 Hz to 63 Hz
Power factor correction (PFC)	0.95
Control voltage output	48 V / 0.5 A

## Connections and Interfaces

- 2 x analog AF inputs
- RS485 interface for expansion modules
- 1 x fault message output
- 2 x Ethernet
- 1 x control line input
- 4 x mandatory call outputs
- 1 x USB service interface
- 1 x control voltage output 48 VDC / 0.5 A
- 2 x mains voltage input
- 1 x DC voltage input



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<ul> <li>Design</li> </ul>	19" rack mounting
Height x width x depth	132 mm x 430 mm x approx. 330 mm (5.2" x 16.9" x 13")
<ul> <li>Display</li> </ul>	128 x 64 screen resolution
Weight	Max. 13.5 kg (max. 29.8 lbs) (depending on device type)

# **Environmental Requirements and Standards**

•	Ambient temperature during operation	-5 °C to +50 °C (+23 °F to +122 °F)
•	Relative humidity (non-condensing)	Max. 95 %
•	EMC	IEC/EN 61000-6-2 IEC/EN 61000-6-4

The chart below describes the different configuration options and resulting number of independent audio channels and speaker circuits.

and speaker circuits.	1					
Туре	600 NPA 42	600 NPA 41	600 NPA 40	600 NPA 32	600 NPA 31	600 NPA 30
Amplifier slot 1	2 x 150 W	2 x 150 W	2 x 150 W	1 x 300 W	1 x 300 W	1 x 300 W
Amplifier slot 2	2 x 150 W					
Total output	600 W					
Audio channels	4	4	4	3	3	3
Speaker circuits	8	8	8	8	8	8
AC power supply	2	1	-	2	1	-
DC power supply	1	1	1	1	1	1
Type number	302-142-500	302-141-500	302-140-500	302-142-400	302-141-400	302-140-400

Туре	600 NPA 22	600 NPA 21	600 NPA 20	300 NPA 22	300 NPA 21	300 NPA 20
Amplifier slot 1	1 x 300 W	1 x 300 W	1 x 300 W	2 x 150 W	2 x 150 W	2 x 150 W
Amplifier slot 2	1 x 300 W	1 x 300 W	1 x 300 W	-	-	-
Total output	600 W	600 W	600 W	300 W	300 W	300 W
Audio channels	2	2	2	2	2	2
Speaker circuits	8	8	8	4	4	4
AC power supply	2	1	-	2	1	-
DC power supply	1	1	1	1	1	1
Type number	302-142-300	302-141-300	302-140-300	302-142-200	302-141-200	302-140-200



Туре	300 NPA 12	300 NPA 11	300 NPA 10
Amplifier slot 1	1 x 300 W	1 x 300 W	1 x 300 W
Amplifier slot 2	-	-	-
Total output	300 W	300 W	300 W
Audio channels	1	1	1
Speaker circuits	4	4	4
AC power supply	2	1	-
DC power supply	1	1	1
Type number	302-142-100	302-141-100	302-140-100

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Subject to technical modifications