2N® Helios IP Audio Kit

Voice communication for all equipment

Offer your customers convenience

Have you ever wondered just how many misunderstandings could have been avoided if you could have communicated directly with a customer who needs assistance with the car park pay point in a shopping centre? By simply pressing a button the customer could call and ask for help.

With the 2N® Helios IP Audio Kit solution, you can now afford your customers the convenience of a live attendant, and be a step ahead of the competition!

This compact module offers a range of interfaces as in microphone, loudspeaker, button and keyboard connections with universal inputs and outputs for controlling lighting or barriers.

Why choose the 2N® Helios IP Audio Kit?

- Communication using SIP 2.0 protocol
- Integrated web server for easy configuration
- Power supply via PoE or from an external source
- Wide connectivity options
- Powerful, 10W amplifier
- Outputs for 3 LED signal lights

Use:

- **Parking systems**
  Communications functionalities for gates, barrier control and pay points.
- **Information points**
  Information boards with the capability of immediate connection with a vacant hotel or taxi service.
- **Emergency communication points**
  Built-in intercoms.
- **Industrial furnishings**
  Workplace equipment with a built-in intercom to alert the foreman or maintenance staff quickly.
- **Cash dispensers**
  Make immediate contact with the bank possible if your card has been retained.

If you are interested in our product please call +420 261 301 500 or email us at sales@2n.cz.
To get more information visit **www.2n.cz**.

Interface description:

Power
Terminals for power connection, 9-36V DC

LAN interface
2x RJ45 10/100Base-TX, Integrated 2port LAN switch, backup power connection via PoE 802.3af

RESET button
Multifunctional button for resetting the apparatus, switching DHCP and returning the apparatus to factory settings

Relay output
1 relay output for NO or NC functions

Audio module interface
Interface for connecting the external module with buttons and LED signal lights

LED signal lights
3 outputs for attaching LED signal lights

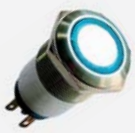
Audio interface
1x 10W output socket from the amplifier for connecting a loudspeaker,
1 input socket for an electret microphone,
1 line out connection for connecting an external amplifier,
1 line out for an external audio source

Keyboard interface
Interface for connecting up to 16 independent buttons or a matrix keyboard 4x4

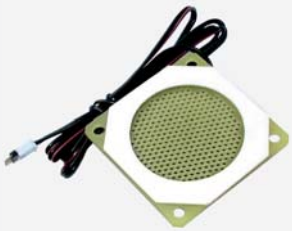
Digital outputs
2 powered digital outputs, 12V/650mA

Digital inputs
2 galvanized isolated digital input sockets

Accessories possible:


Illuminated button


Microphone


Loudspeaker


Wall-mounting bracket or on DIN rail

Technical parameters:

Signalling protocol

	SIP 2.0 (UDP)

Audio stream

Protocols	RTP/RTSP
Codecs	G.711
Volume control	adjustable with automatic adaptive settings
Full duplex	Yes (AEC)

Power source

From external source	Type 12V DC (9 – 36V DC), max. 1.5A
PoE	802.3af (Class 0 – Max. 12.95W)

LAN interface

Number of LAN interfaces	2 (LAN1 and LAN2)
PoE	802.3af only on LAN1
Parameters	10/100BASE-TX with Auto-MDIX, RJ-45
Recommended cable sizes	Cat-5e or better

Audio interface

Microphone input	Normal electret microphone
Amplifier output	Class D amplifier, MONO output socket, THD < 1%
	Max. 10W/4Ω
	Max. 5W /8Ω
	Max. 2,5W/16Ω
Line out socket	600Ω

Button/keyboard interface

Number of buttons	Up to 16 independent buttons in 4 x 4 matrix
Matrix outputs	4 (ROW1-4 terminals)
	U_{out} <0,1V (L), U_{out} >3,2V (H), max. 8mA
Matrix inputs	4 (COL1-4 terminals)
	U_{in} < 1,15 (L), U_{in} > 2,15V, max. U_{in} = 5V

LED control outputs

Number of outputs	3 (LED1+-, LED2+- a LED3+- terminals)
Output current	Typ. 20mA
Output voltage	Max. 12V (see note 1)

Digital outputs

Number of outputs	2 (OUT1+- a OUT2+- terminals)
Type of output	Powered output socket with short-circuit protection
Output voltage	12V (see note 1)
Output current	Max. 650mA

Logic inputs

Number of inputs	2 (IN1+- a IN2+- terminals)
Input type	Galvanized, isolated inputs (opto-isolators)
Parameters	U_{in} < 1,1V (L), U_{in} > 3V (H), max. U_{in} = 32V

Relay output

Number of outputs	1 (NC, NO, COM terminals)
Limit parameters (DC)	Max. 30VDC/1A
Limit parameter (AC)	Max. 125VAC/0,3A

Mechanical properties

Operating temperature	-40°C - 55°C
Operating relative humidity	10% - 95% (not-condensing)
Storage temperature	-40°C - 70°C
Dimensions	142x98x34 mm (order no. 9154100)
	138x90x26 mm (order no. 9154101)
Weight	order no. 9154100 max. 280g, order no. 9154101 max. 150g
Protection cover grade	IP20 (order no. 9154100), IP00 (order no. 9154101)
Mounting	on wall or on DIN rail

Note: If power supply from adapter does not reach 12V, then the output voltage will be limited to voltage level supplied to the unit.

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