

AP 701

Access Panel



Features and Functions

- IP desktop intercom station for use in control stations, measuring stations, and control rooms
- Resistive color touch display for flexible operation with finger, industrial gloves, and stylus pen
- Touch display layout: 1 operating layer with 20 display buttons, dial keypad, and service layer, can be extended to up to 10 operating layers with 20 display buttons each
- 12 mechanical keys with multi-color status indication (e.g. call signaling) and 3 function keys
- Individual button labeling with different characters possible, e.g. Cyrillic
- Audio bandwidth of up to 16 kHz
- Network connection via Ethernet
- PoE or external power supply
- Light sensor to automatically adjust the light intensity of touch display and keys

The IP desktop intercom station of the Access Panel (AP) series is used together with the INTRON-D *plus* communication and public address system from INDUSTRONIC. It is designed for use in control stations, measuring stations, or control rooms. The compact design integrates a color touch display with easy-to-use menu and dial keypad as well as mechanical keys with multi-color status indication. The device status is signaled via 3 LEDs.

The basic configuration of the desktop intercom station has 1 operating layer with up to 20 display keys which can be individually configured. To implement more complex communication solutions, you can easily upgrade the touch display to 6 operating layers with up to 120 display buttons or to 10 operating layers with up to 200 display buttons.

The modular design allows for further flexibility: You can connect a handset and up to 4 additional keypads to the desktop intercom station at any time.



12 AP 701H



36 AP 701



36 AP 701H

Speaker and Microphone Redundancy

The gooseneck microphone is monitored according to the DIN EN 60849 standard. In case of a microphone failure, the conversation automatically switches to the integrated additional microphone.

Together with the redundant speaker this ensures a reliable voice transmission even in case of a failure.

Microphone Illuminated Ring

The installed microphone illuminated ring indicates if the gooseneck microphone is active, inactive, or failed.



Integrated Web Interface

With the integrated web interface you can view fault and error messages or update the system software. Invoke and use it with a standard web browser.



Easily Expandable

Based on customer or application requirements the intercom station can be expanded by a handset and up to 4 additional keypads. Thus a total of 108 mechanical keys is possible.



16 kHz Audio Bandwidth

The 16 kHz audio bandwidth ensures highest intelligibility and clarity of speech, even in high ambient noise areas.

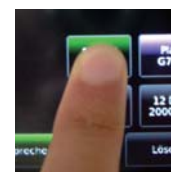
Flexible

The basic configuration of the IP desktop intercom station has one operating layer with up to 20 freely programmable display buttons, dial keypad, and service layer.

To implement more complex communication solutions, upgrade the touch display to up to 10 operating layers with up to 200 display buttons.

Touch Display

The resistive touch display responds to pressure and is used to trigger functions (e.g. trigger an alarm, make a voice announcement, establish a call to another subscriber, etc.) and can also be used with industrial gloves.



Module Overview



Type	12 AP 701
Description	IP desktop intercom station with 7" color touch display, 12 mechanical keys with integrated signaling function, 3 function keys, network interface included for the connection to INTRON-D <i>plus</i> systems. Display layout: 1 operating layer with 20 display buttons, dial keypad, and service layer.
Type number	302-051-000
Width x height x depth	267 mm x 80 mm x 242 mm (10.5" x 3.1" x 9.5")
Weight	Approx. 2.5 kg (approx. 5.6 lbs)
Color	RAL 9011 (graphite black)
Interfaces	1 x RJ45 port 10/100 Mbit/s (LAN + PoE) 1 x DC power jack (for external power supply) 1 x 9-pin D-sub female connector to connect an external I/O unit with potential-free inputs and outputs and/or a booster amplifier 1 x Mini USB service port







Type	24 APK 01
Description	Additional keypad with 24 mechanical keys, integrated signaling function and protective labels. It is used to expand the IP desktop intercom station of the AP series. An optional key cover is available (see page 4).
Type number	302-050-000
Width x height x depth	86 mm x 80 mm x 242 mm (3.4" x 3.2" x 9.6")
Weight	Approx. 0.7 kg (approx. 1.6 lbs)
Color	RAL 9011 (graphite black)

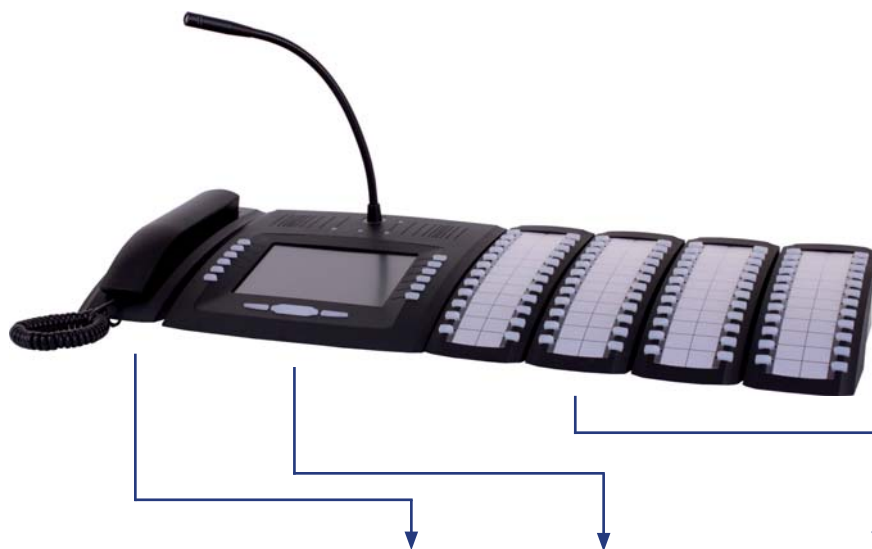


Type	1 APH 01
Description	Handset with cradle, can be used together with the IP desktop intercom stations of the AP series
Type number	302-050-200
Width x height x depth	86 mm x 98 mm x 242 mm (3.4" x 3.2" x 9.6")
Weight	Approx. 0.8 kg (approx. 1.8 lbs)
Color	RAL 9011 (graphite black)

Accessories

	<p>Type EU power adapter 48 V</p> <p>Description For power supply without Power over Ethernet (PoE), can be used throughout Europe, cable length approx. 1.9 m (6.2 ft), input voltage 90 VAC to 264 VAC / 47 Hz to 63 Hz, output voltage 48 VDC / 0.31 A</p> <p>Type Number 309-031-500</p>
	<p>Type Universal power adapter 48 V</p> <p>Description For power supply without Power over Ethernet (PoE), interchangeable power plugs, can be used worldwide (Asia, Australia, Europe, UK, and USA), cable length approx. 1.4 m (5 ft), input voltage 90 VAC to 264 VAC / 47 Hz to 63 Hz, output voltage 48 VDC / 0.42 A</p> <p>Type Number 309-042-200</p>
	<p>Type Key cover for 8 keys</p> <p>Description Transparent plastic key cover for the 24 APK 01 additional keypad to protect the upper 8 keys against accidental actuation. You can only press these keys if the key cover is open.</p> <p>Type Number 302-050-050</p>
	<p>Type Screen protector</p> <p>Description To protect the touch display against scratches and dirt, self-adhesive, dust and grease resistant, anti-reflection coating</p> <p>Type Number 302-051-052</p>

Series Overview Chart



Type	Type Number	Handset	Basic Device	Additional Keypad*
12 AP 701	302-051-000		x	
36 AP 701	302-051-100		x	1
60 AP 701	302-051-200		x	2
84 AP 701	302-051-300		x	3
108 AP 701	302-051-400		x	4
12 AP 701H	302-051-500	x	x	
36 AP 701H	302-051-600	x	x	1
60 AP 701H	302-051-700	x	x	2
84 AP 701H	302-051-800	x	x	3
108 AP 701H	302-051-900	x	x	4

*All types with additional keypad can be ordered with a key cover for 8 keys (e.g.: type 36 AP 701/C8 has the type number 302-051-100/C8).

Type Number	Description
100-740-800	Functional extension with 6 operating layers to implement up to 120 display buttons
100-740-801	Functional extension with 10 operating layers to implement up to 200 display buttons
100-740-802	Customization of display buttons: e.g. button size, shape, and color

Technical Data

Electrical Data	• Power supply	PoE according to 802.3af, 15 W or external power supply (42 VDC to 57 VDC, 0.3 A at 48 V)
	• Typical power consumption	6 W
	• Amplifier output	2 x 0.75 W
	• Frequency range	200 Hz to 16 kHz
	• Speaker	2 x 8 W / 8 Ohms
	• Sound pressure level (distance of 50 cm (19.7"))	90 dB +/-3 dB
	• Touch display	17.8 cm (7"), 800 x 480 pixels, resistive
Environmental Requirements and Standards	• Ambient temperature during operation	-10 °C to +50 °C (14 °F to 122 °F)
	• Relative humidity (non-condensing)	Max. 95 %
	• Degree of protection	IP42
	• EMC	IEC/EN 61000-6-2 IEC/EN 61000-6-4
	• Microphone monitoring according to	DIN EN 60849
Network Requirements	• Power over Ethernet (PoE) recommended	
	• IPv4 network	
	• Support of UDP, SCTP, RTP and RTCP protocols	
	• Quality of Service (QoS)	
	• Ideal latency value: <20 ms (max. 50 ms)	
	• Jitter: max. 10 ms	
	• 10Base-T/100Base-TX Ethernet (IEEE 802.3), 100 MBit/s recommended	
• 200 kBit/s basic bandwidth and 200 kBits per active audio channel		

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