

# GE 300

## Compact IP Intercom Server



Compact  
size

16 kHz  
eHD Voice

Audio +  
functionality

Flexible  
to use

### Compact and suitable for networks

The Intercom Server GE 300 is ideal for Intercom systems where small, manageable units are combined to form a network. Each GE 300 acts as an IP Intercom Server that controls the various interfaces: interface cards for speech, control and indication functions, as well as interfaces for communication with other systems such as video systems, door and gate control, telephone systems and more.

The simple modular construction of the basic operating system enables continuous upgrading for new applications and features. The latest design results in the system being physically compact and compliant with the highest standards of electronic reliability.

All kinds of Intercom stations can be connected to the GE 300 – digital, analogue and IP-based stations. The connection of the special GEI 300 interface housing also allows the use and operation of cards from the GE 800 Intercom system.

### Features and highlights

- Compact housing in polycarbonate construction, suitable for wall mounting
- Easy installation and commissioning
- More than 150 standard features available
- For all kinds of Intercom stations (IP-based, digital or analogue)
- Digital networking over IP, 2-wire lines, E1 or ISDN
- Integrated functions for door and gate control, alarms and conferences as well as central control desks
- Plug-and-play CCTV integration
- Flexible server expansion by means of different feature packages
- Wide range of applications
- User-friendly configuration with PC software (included in extent of supply)

## Product details

### GE 300 variants



#### GE 300

- Intercom Server with five plug-in slots
- Up to 40 subscribers possible
- One AF input (for music or alarm)
- Two inputs for floating contacts
- Two relay outputs
- Configuration via Ethernet or RS-232

#### GE 300WR

- Same features as the Intercom Server GE 300
- Wide range input 20–36 VDC
- Can be used for DC-UPS applications

### Additional housings



#### GEZ 300

- Expansion housing with five plug-in slots for the Intercom Server GE 300
- Up to 80 subscribers possible in combination with the Intercom Server GE 300
- Can only be used in combination with the Intercom Server GE 300



#### GEI 300

- Interface housing with two slots for G8 interface cards
- Can only be used in combination with the Intercom Server GE 300

# GE 300

## Technical specifications

### Technical data GE 300/GE 300 WR

<b>Power supply:</b>	GE 300: 24 VDC (±5 %) GE 300WR: 20–36 VDC
<b>Emergency power consumption:</b>	without cards: 200 mAh with cards: see corresponding data sheet
<b>Power consumption:</b>	GE 300: depending on settings in CCT 800 max. 30 W, 60 W or 70 W GE 300WR: max. 30 W
<b>Frequency response:</b>	50 Hz to 15 kHz (–3 dB)
<b>Total harmonic distortion:</b>	< 0.9%
<b>Relay outputs:</b>	max. switching capacity: 60 W/62.5 VA max. switching current: 2 A max. switching voltage: 60 VDC/30 VAC
<b>Music input:</b>	max. 800 mV <sub>RMS</sub> at 10 kΩ, 16 kHz
<b>Inputs IN1, IN2:</b>	for floating contacts, max. line resistance: 1.5 kΩ
<b>Operating temperature range:</b>	0 °C to +50 °C (+32 °F to +122 °F)
<b>Storage temperature range:</b>	–30 °C to +60 °C (–22 °F to +140 °F)
<b>Relative humidity:</b>	20 to 80%, not condensing
<b>Mounting:</b>	wall mounting
<b>Dimensions (W x H x D):</b>	310 x 210 x 77.5 mm (12.21 x 8.27 x 3.05 in)
<b>Weight incl. package:</b>	approx. 1,500 g (3.31 lbs)

### Extent of supply

GE 300, GE 300WR, GEZ 300 and GEI 300 incl. short reference, cable ties, screws and wall plugs (anchors).

The variants differ according to their power supply:

- GE 300, GE 300WR, GEZ 300: without power supply unit/transformer
- GE 300EU: incl. 24 VDC power supply unit with Europlug
- GE 300CA: incl. 24 VDC power supply unit with adapters (AUS, USA, UK)
- GEZ 300EU: incl. 230 V transformer (Europe)
- GEZ 300AU: incl. 230 V transformer (Australia)
- GEZ 300US: incl. 120 V transformer (USA)
- GEZ 300UK: incl. 230 V transformer (UK)



### Technical data GEZ 300

<b>Power supply:</b>	24 VAC (±5 %) 24–35 VDC
<b>Energy power consumption:</b>	without cards: 200 mAh with cards: see corresponding data sheet
<b>Power consumption:</b>	maximum (All Call): 40 VA
<b>Frequency response:</b>	50 Hz to 15 kHz (–3 dB)
<b>Total harmonic distortion:</b>	< 0.9%
<b>Operating temperature range:</b>	0 °C to +50 °C (+32 °F to +122 °F)
<b>Storage temperature range:</b>	–30 °C to +60 °C (–22 °F to +140 °F)
<b>Relative humidity:</b>	20 to 80%, not condensing
<b>Mounting:</b>	wall mounting
<b>Dimensions (W x H x D):</b>	310 x 210 x 77.5 mm (12.21 x 8.27 x 3.05 in)
<b>Weight incl. package:</b>	with transformer approx. 2,700 g (5.95 lbs) without transformer approx. 1,550 g (3.42 lbs)

### Technical data GEI 300

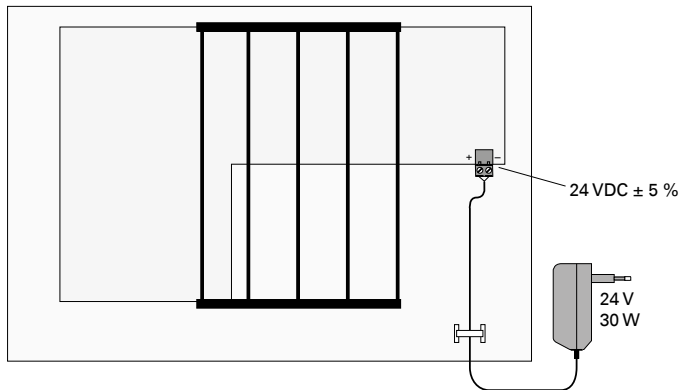
<b>Power supply:</b>	via GE 300/GE 300WR or GEZ 300
<b>Energy power consumption:</b>	without cards: no power consumption with cards: see corresponding data sheet
<b>Operating temperature range:</b>	0 °C to +50 °C (+32 °F to +122 °F)
<b>Storage temperature range:</b>	–30 °C to +60 °C (–22 °F to +140 °F)
<b>Relative humidity:</b>	20 to 80%, not condensing
<b>Mounting:</b>	wall mounting
<b>Dimensions (W x H x D):</b>	310 x 210 x 77.5 mm (12.21 x 8.27 x 3.05 in)
<b>Weight incl. package:</b>	approx. 1,500 g (3.31 lbs)

### Expansion

	Subscribers	Outputs	Inputs
<b>Basic expansion:</b>	0	2	2
<b>Max. expansion:</b>	see „Plug-in position of the cards“		

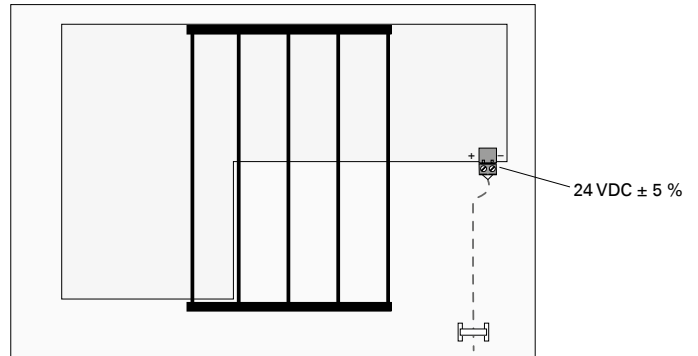
## Technical details – power supply

### GE 300 incl. 30 W power supply unit



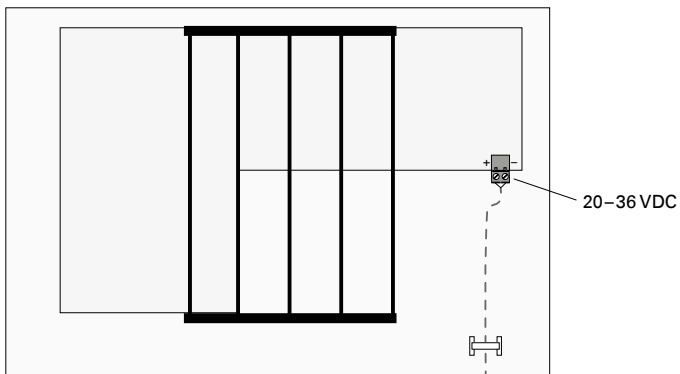
- GE 300EU (incl. 30 W power supply unit with Europlug – **PA30W24V-EU**)
- GE 300CA (incl. 30 W power supply unit with US/UK/AUS adapter – **PA30W24V-CA**)

### GE 300 without power supply unit



- Delivery without power supply unit
- Specific section of power supply unit possible

### GE 300WR



- Delivery without power supply unit
- DC-UPS applications
- Wide range input

#### Attention:

All connected circuits must fulfil the following requirements:

- Safety Extra Low Voltage (SELV) and Limited Power Source (LPS) according to IEC/EN 60950-1 or
- ES1, PS2 circuits and Annex Q (Limited Power Source) according to IEC/EN/UL 62368-1

## Overview max. number of digital subscribers

	Max. number of digital subscribers with power supply via Intercom Server				
	Power supply	Intercom Server (GE 300/GE 300WR)	Intercom Server + expansion housing (GEZ 300)	Intercom Server + interface housing (GEI 300)	Intercom Server + expansion + interface housing (GEZ 300 and GEI 300)
GE 300	30 W	16	16 + 16	12	16 + 12
	60 W / 70 W	20	20 + 16	20	20 + 12
GE 300 WR	30 W	16	16 + 16	12	16 + 12

Example: If an Intercom Server GE 300 is operated with a 60 W power supply unit, it is possible to supply max. 36 subscribers via the Intercom Server using an Intercom Server with an expansion housing.

#### Note:

If more digital subscribers are needed, the following options are available:

- Using external power supply for digital stations (max. 20 digital subscribers per Intercom Server can be operated).
- Using an Intercom Server GE 800.

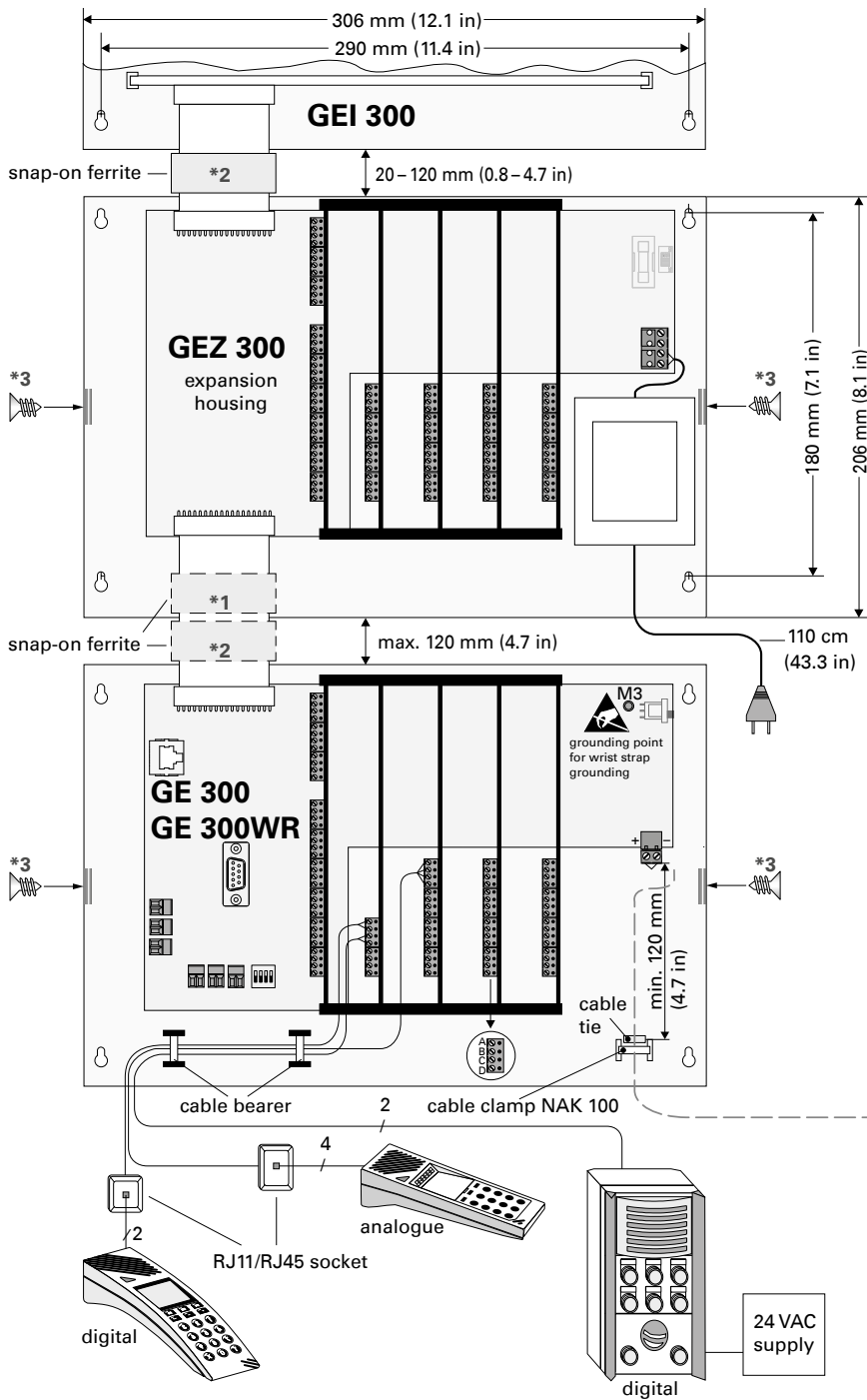


## Plug-in cards for GE 300

Subscriber cards with speech storage	
<b>G3-IP</b>	IP subscriber card for up to 8 IP Intercom stations; basic card for 4 subscribers with feature level B, upgrades to 8 subscribers and feature level C, D or P can be activated by licence keys
<b>G3-GED</b>	Subscriber card for 4 digital 2-wire Intercom stations; basic card with feature level B, upgrade to feature level C, D or P can be activated by a licence key
<b>G3-GET</b>	Subscriber card for 4 analogue 4-wire Intercom stations; basic card with feature level B, upgrade to feature level C, D or P can be activated by a licence key
<b>G3-TEL4 <sup>1</sup></b>	Telephone subscriber card with 4 analogue FXS ports e.g. for telephones; card is available in feature level C or D
Input and output cards	
<b>G3-16A</b>	Plug-in card with 16 relay outputs (4 of which are make, open or switch over contacts, 12 only as make contacts)
<b>G3-16E</b>	Plug-in card with 16 inputs for floating contacts, with or without line monitoring; read in of 5 operation states (Idle, Active 1, Active 2, Short, Line break)
<b>G3-8E8A</b>	Plug-in card with 8 inputs for floating contacts and 8 relay outputs (make, open or switch over); read in of 5 operation states with inputs (Idle, Active 1, Active 2, Short, Line break)
Interface cards	
<b>G8-V24-PRO <sup>1</sup></b>	Programmable V24 card with 2 RS-232 interfaces, of which 1 can be configured as RS-422
<b>G3-TEL</b>	Telephone interface with 1 FXO port, e.g. for connection to an analogue subscriber of a telephone system or directly to a standard telephone line
<b>G8-SELCALL <sup>1</sup></b>	Radio interface for connection of selective-call radio systems to Intercom systems, available for selective tones according to ZVEI and CCIR
<b>G8-AUD-2 <sup>1</sup></b>	Digital audio recording card with 2 audio channels (IN/OUT) and 2 relay contacts; basic card in feature level B, upgrade to feature level D can be activated by a licence key
<b>G8-AUD-4 <sup>1</sup></b>	Digital audio recording card with 4 audio channels (IN/OUT) and 2 relay contacts; basic card in feature level B, upgrade to feature level D can be activated by a licence key
IP networking cards	
<b>G3-LAN</b>	GE 300 IP network card for connections via Ethernet, up to 8 LAN connections, bandwidth for up to 8 simultaneous conversations, music programs or radio channels in full quality
HDSL, ISDN and multiplexer networking cards	
<b>G8-CNET-W <sup>1</sup></b>	High-speed network card for connections via 2 wires (multi channel – HDSL) with a length of up to 4 km (2.48 miles), bandwidth for up to 12 conversations, music programs or radio channels; up to 4 servers in series or 100 servers in a tree structure
<b>G8-CNET-E1 <sup>1</sup></b>	High-bitrate network card for connections via transmission routes that conform to the E1 standard, connection to multiplexer or media converter, bandwidth for up to 10 conversations, music programs or radio channels; up to 4 servers in series or 100 servers in a tree structure
<b>G3-S0-I <sup>1</sup></b>	Network card for connection via the S0 interface of an ISDN connection, bandwidth for 2 conversations (G3-S0-I one conversation) between 2 servers networked via S0
VoIP interfacing cards	
<b>G8-IAX <sup>1</sup></b>	Interface card for up to 8 trunk connections to VoIP servers, which support the IAX2 protocol; basic card with 4 connections and feature level B, upgrades to 8 connections and feature level C or D can be activated by licence keys
<b>G3-IAX</b>	Interface card for up to 4 trunk connections to VoIP servers, which support the IAX2 protocol; basic card with 2 connections and feature level B, upgrades to 4 connections and feature level C or D can be activated by licence keys
<b>G8-VOIPSERV <sup>1</sup></b>	Server card for trunk connections to VoIP servers, which support the SIP protocol, or direct connection of SIP telephones as main or substations
<b>G8-VOIPREC2 <sup>1</sup></b>	Recording card with 2 GB memory for a total of 3,500 minutes of recording time when using 7 kHz (up to 8 channels simultaneously)
<b>G3-IF</b>	Powerful interface card with up to 2 virtual TCP/IP interfaces, standard Commend Intercom protocol and 2 RS-232 for connection of external systems

<sup>1</sup> For use in an Intercom Server GE 300, these cards require the interface housing GEI 300.

## Mounting, cable run



### Mounting options

**\*1** Mounting option 1: snap-on ferrite inside the housing

#### Attention:

When installing the snap-on ferrite, make sure that the components between the housings of GE 300 and GEZ 300 will not be damaged (e.g. in case of vibrations etc.).

**\*2** Mounting option 2: snap-on ferrite outside the housing

#### Attention:

When installing the outside the housing, keep a minimum distance of 20 mm (0.8 in) between GE 300 and GEZ 300.

**\*3** Protection against contact acc. to IEC/EN 60950-1: For installation in the operator access area, the housing cover of the GE 300, GEZ 300 or GEI 300 has to be screwed onto the housing.

#### Attention:

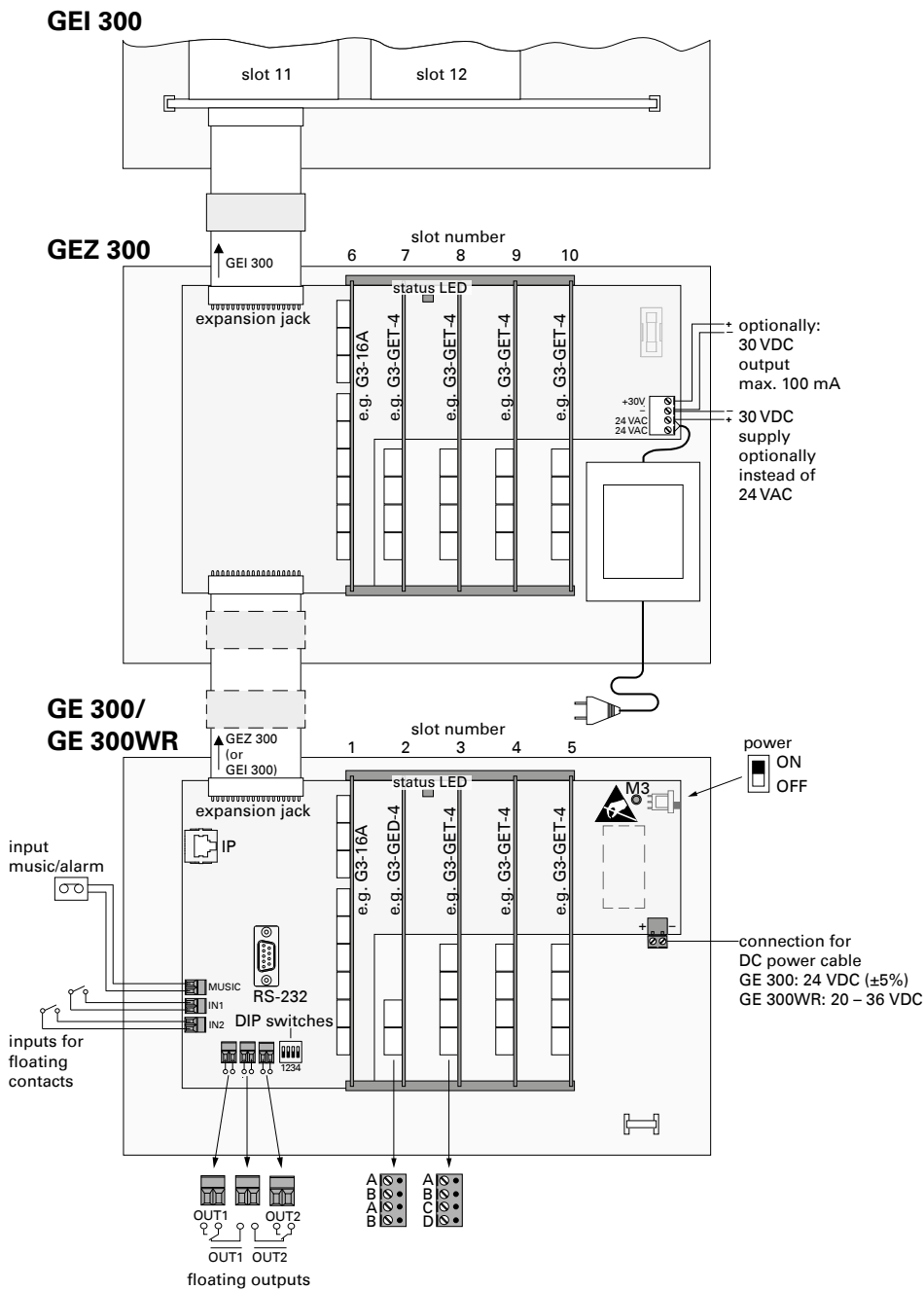
During installation, an easily accessible disconnecting device for the GE 300 power supply must be provided. This device must ensure complete disconnection of the power supply from the mains at all poles.

For installations under 2 m, this disconnection can also be done by unplugging the delivered power supply from the socket.

### GE 300/GE 300WR — fixing the DC power cable into place:

1. Put the DC power cable into the notch.
2. At a distance of min. 120 mm (4.7 in) to the screw terminal, attach a cable tie to the adapter cable.
3. Plug in the cable clamp NAK 100.

Connection diagram



**Attention:**

For DC power supply of the combination of a GE 300 and GEZ 300, one of the components must be supplied via an additional galvanically isolated DC/DC power supply. This does not apply to the combination of a GE 300WR and GEZ 300, as the GE 300WR comes with a built-in galvanically isolated DC/DC power supply.

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The development and manufacturing processes are certified in accordance with **EN ISO 9001:2015**.



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