

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
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Additional housings



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GE 300

Technical specifications

Technical data GE 300/GE 300 WR

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



Technical data GEZ 300

Power supply:	24 VAC (±5 %) 24–35 VDC
Energy power consumption:	without cards: 200 mAh with cards: see corresponding data sheet
Power consumption:	maximum (All Call): 40 VA
Frequency response:	50 Hz to 15 kHz (–3 dB)
Total harmonic distortion:	< 0.9%
Operating temperature range:	0 °C to +50 °C (+32 °F to +122 °F)
Storage temperature range:	–30 °C to +60 °C (–22 °F to +140 °F)
Relative humidity:	20 to 80%, not condensing
Mounting:	wall mounting
Dimensions (W x H x D):	310 x 210 x 77.5 mm (12.21 x 8.27 x 3.05 in)
Weight incl. package:	with transformer approx. 2,700 g (5.95 lbs) without transformer approx. 1,550 g (3.42 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 GEI 300

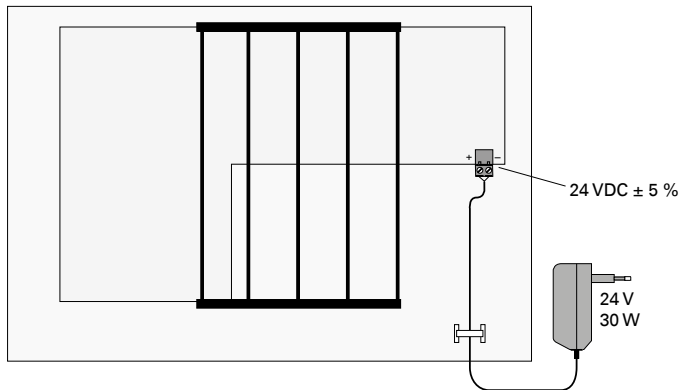
Power supply:	
Energy power consumption:	
Operating temperature range:	
Storage temperature range:	
Relative humidity:	
Mounting:	
Dimensions (W x H x D):	3
Weight incl. package:	

Expansion

	Subscribers	
Basic expansion:	0	
Max. expansion:	see “„	

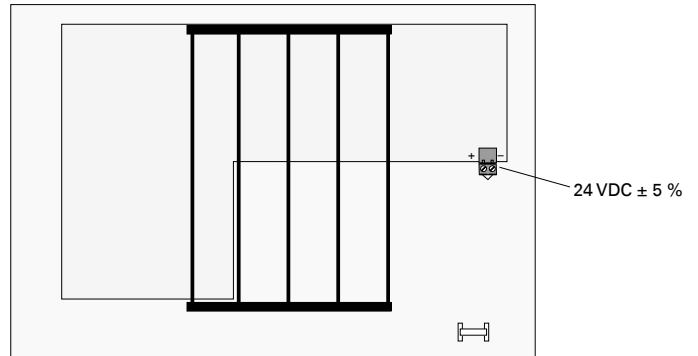
Technical details – power supply

GE 300 incl. 30 W power supply unit



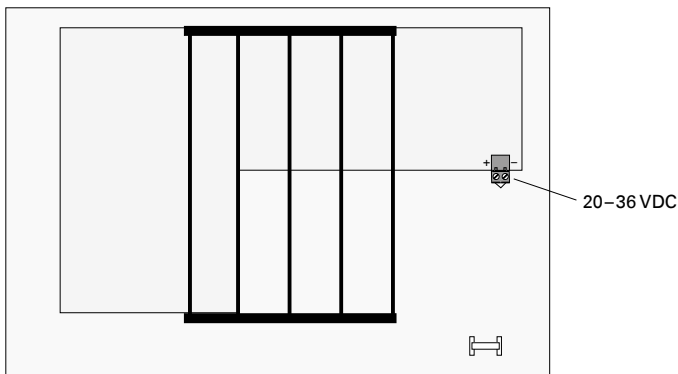
- GE 300EU (incl. 30 W power supply unit with Europlug – **PA30W24V-EU**)
- GE 300CA (incl. 30 W power supply unit with US/UK/AUS adapter – **PA30W24V-CA**)

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.

GE 300

Installation Instructions

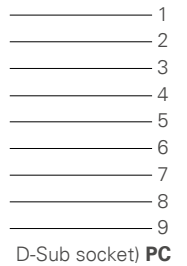
Configuration via IP

Intercom Servers of the type GE 300 are automatically recognised in local networks by CCT 800 1.3 for configuration (reachable via layer 2).

cable is required

Precautions

- This is a Class A product (standard EN 55032:2015). In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.
- GEZ 300: Defective power cables of the transformer may not be repaired or replaced. In case of defective power cables, the entire transformer must be replaced.
- Mounting and installation of the Intercom Server GE 300 and of the equipment may only be carried out by authorised service personnel.
- Cards may be inserted or removed only with voltage switched off.
- Before exchanging of cards, ESD precautions must be observed. The M3 screw nut of the motherboard G3-GEM is used as grounding point for wrist strap grounding (see „Mounting, cable run“).



ordered with the

Plug-in position of the cards

The plug-in cards can be inserted in the following slots:

Card type	GE 300					GEZ 300 ⁵				
	1	2	3	4	5	6	7	8	9	10
G3-GET	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-GED	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-IP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-8E8A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-16A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-16E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-TEL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-IF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-LAN ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G3-IAX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G8-IAX	–	–	–	–	–	–	–	–	–	–
G8-VOIPSERV ³	–	–	–	–	–	–	–	–	–	–
G8-VOIPREC2 ⁴	–	–	–	–	–	–	–	–	–	–
G8-V24-PRO	–	–	–	–	–	–	–	–	–	–
G8-SELCALL ²	–	–	–	–	–	–	–	–	–	–
G8-CNET-E1 ¹	–	–	–	–	–	–	–	–	–	–
G8-CNET-W ¹	–	–	–	–	–	–	–	–	–	–
G8-AUD	–	–	–	–	–	–	–	–	–	–
G8-S0-1	–	–	–	–	–	–	–	–	–	–
G8-TEL4	–	–	–	–	–	–	–	–	–	–

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¹ Only one G3-LAN (card), one CNET-W/E1 (card) or one L3-LAN-4 (licence) may be used simultaneously.

² The second slot of the GEI 300 is occupied by the G8-V24-PRO delivered with the G8-SELCALL.

³ Min. G8-VOIPSERV Rev. AB.

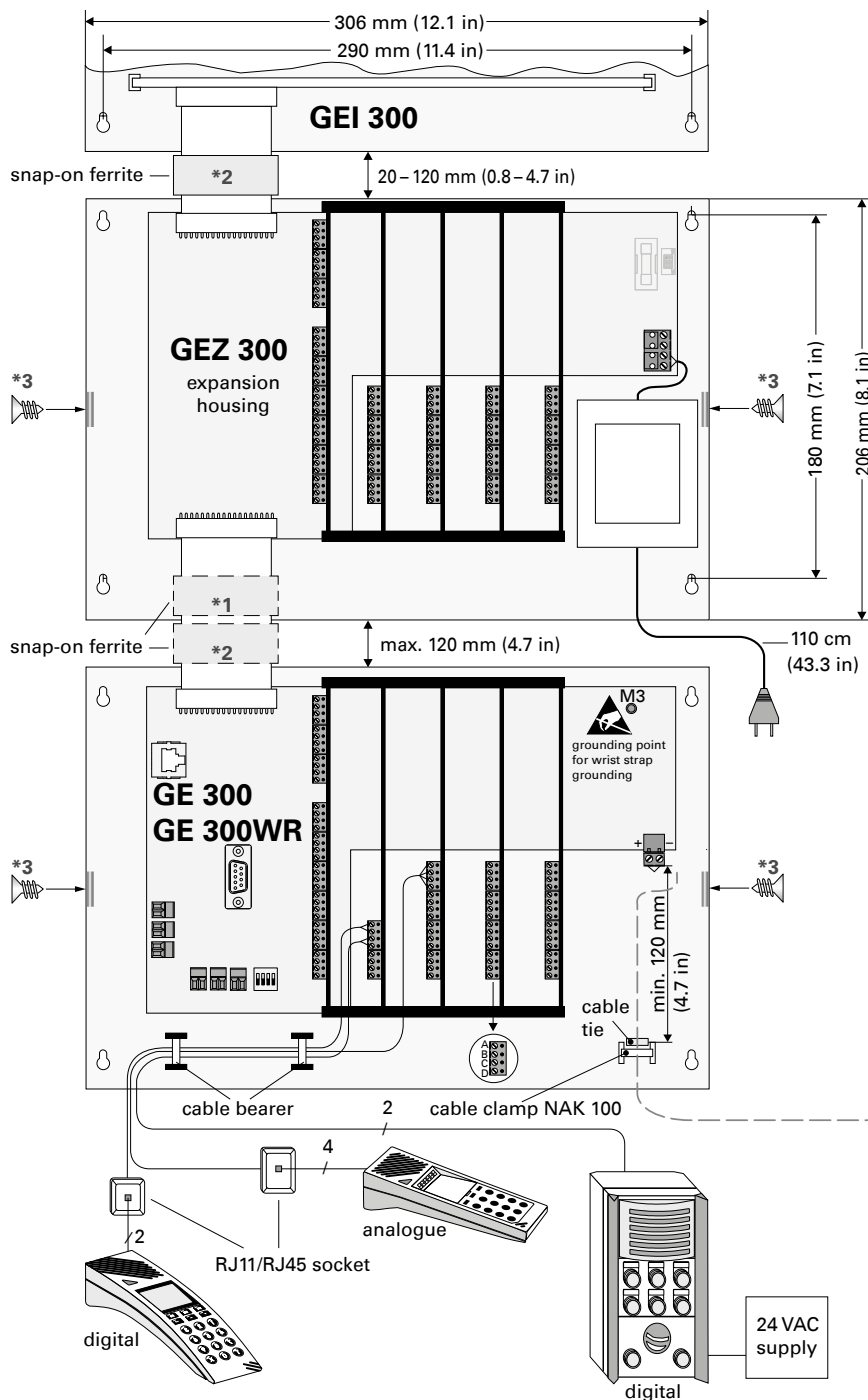
⁴ When using GEZ 300 with H-G3-GEZ older than 1.3, the G8-VOIPREC2 only works in slot 11.

⁵ Out of 20 possible digital subscribers, a maximum of 16 subscribers can be supplied with power via the expa

Plug-in cards for GE 300

Subscriber cards with speech storage	
G3-IP	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
G3-GED	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
G3-GET	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
G3-TEL4¹	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	
G3-16A	Plug-in card with 16 relay outputs (4 of which are make, open or switch over contacts, 12 only as make contacts)
G3-16E	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)
G3-8E8A	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	
G8-V24-PRO¹	Programmable V24 card with 2 RS-232 interfaces, of which 1 can be configured as RS-422
G3-TEL	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
G8-SELCALL¹	Radio interface for connection of selective-call radio systems to Intercom systems, available for selective tones according to ZVEI and CCIR
G8-AUD-2¹	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
G8-AUD-4¹	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	

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:

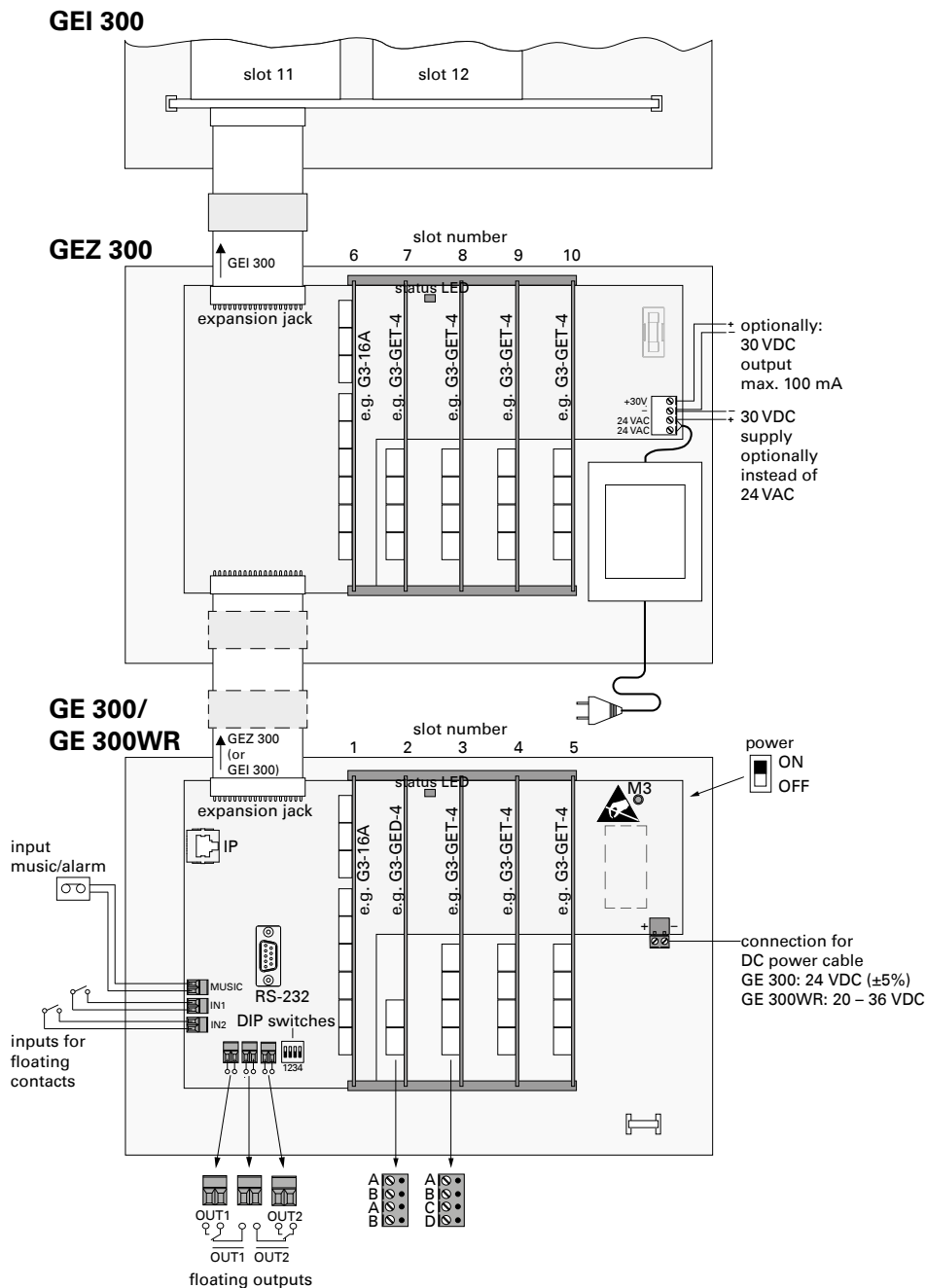
During installation, an easily accessible disconnecting device for the GE 300 power supply must be provided. This device must ensure complete disconnection of the power supply from the mains at all poles.

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.

Quality tested. Reliable. Smart.

COMMEND products are developed and manufactured by Commend International in Salzburg, Austria.

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



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A strong worldwide network

COMMEND is represented all over the world by local Commend Partners and helps to improve security and communication with tailored Intercom solutions.

