C-GE800UL.C

Digital IP-Intercom Server C-GE800UL.C

Both the hardware and the software concept of the C-GE800UL.C Intercom Servers incorporates state-of-the-art technology. All digital and with distributed intelligence the Intercom Server administers up to 112 IP-subscribers. Interaction of all the peripheral devices and cards is controlled by a central processing unit. Each plug-in card or interface has its own front-end processor for controlling its particular features and facilities.

The operating system of the C-GE800UL.C is programmed using the latest, object-orientated software. This means that all present and future requirements in the fields of Intercom systems, security systems, facilities management, etc. can be met - fully digitally and on a IP-basis.

C-GE800UL.C

Basic housing with bus pcb for 17 plug-in slots: processor card, connection card, power supply card, slot 1 to 14 available for subscriber cards (up to 112 subscribers) and/or interface cards. The Intercom Server unit includes an AF input for music/alarm, 2 inputs for floating contacts, 2 Ethernet sockets and one RS 232 socket for (remote) configuration or maintenance.

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E351589

Commend Int. GmbH
C-GE800UL.C
24V AC +/- 5% or
24 – 35V DC
80 VA or 80W

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Technical Data – Benefits

TECHNICAL DATA

AC power supply:	24 V +/- 5% / 80 VA
DC power supply:	24 – 35 V / 80 W
Emergency power consumption:	200 mAh for G8-GEN, G8-NET, G8-GEP, G8-GEB other cards: see corresponding data sheet
Frequency range:	50 to 15 kHz (–3 db)
Transmission bandwidth:	16 kHz
Distortion:	less than 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
Measurements of the housing:	483 x 133 x 229 mm (19.03 x 5.24 x 9.02 inch)
Weight including package:	approx. 5,800 g (12.8 lbs)
Mounting:	19“ , 3 HU
Music input:	max. 800 mV_{rms} at 10 kΩ, 16 kHz
Inputs IN1, IN2:	for floating contacts, max. line resistance: 1.5 kΩ
Thermal dissipation loss: (for calculation of the thermal load)	45.2 W

Note:
In order to comply with the UL product certification requirements, a power supply must be used complying with the LPS requirements of the UL 60950-1 or a NEC Class2 power supply.

Wire range for power supply screw terminals:	AWG 28 – 16
Wire type for power supply wires:	CU

EXPANSION

	Subscriber:	Inputs:
Basic expansion:	0	2
Maximum expansion per Server housing:	112	226
Maximum expansion (239 housings)	30,000 (incl. WAN)	50,000

BENEFITS

- Digital IP-Intercom Server (voice, video, indication and control).
- Integration of other systems via Ethernet and V24 interfaces with own protocol converter.
- The Server housing and connecting technology is specially designed to the requirements of 19“ racks.
- More than 150 standard features
- Latest intercom technology: microprocessor-controlled, high density design, SMD production, object-orientated programming.
- Non-blocking
- Integrated functions for door/gate control, alarms, conferences and central control desks.
- Plug&Play video integration.
- Expandable from 2 to max. 25,000 subscribers without restrictions (up to 30,000 subscribers with restrictions).
- User-friendly configuration with included PC software.

EXTENT OF SUPPLY

1 Intercom Server C-GE800UL.C including:

- 19“ housing (3 height units) with snap-on lid
- G8-GEB Bus PCB (with 17 slots, of which 14 are empty)
- G8-GEN power supply card (incl. installation board G8A-GEN)
- G8-GEP processor card
- G8-NET connection card (incl. installation board G8A-NET)
- Tool for removing of installation boards

NETWORK REQUIREMENTS G8-NET

QoS Requirements

- Maximum One-Way-Delay 100 ms
- Delay-Jitter not above 50 ms
- 0% packet loss for perfect audio quality

Bandwidth

- Required Bandwidth incl. protocol overhead, for upload/download each: speech and data 96 kBit/s
- Speech is compressed according to G.722 standard

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Installation

PRECAUTIONS

- With regard to the CE mark, the Intercom Server is suitable for the following types of application: residential buildings, office and commercial premises, small businesses and industrial premises with public low-voltage mains supply.
- Mounting and installation of the Intercom Server and of the equipment may be carried out only by authorised service personnel.
- Cards may be inserted and removed only with voltage switched off.
- Before exchanging of cards, ESD precautions must be observed. The Earth terminal of the installation board G8A-GEN (see "Connection Diagram G8A-GEN") is used as grounding point for Wrist Strap Grounding.
- Precautions regarding UL certification:
  - In order to comply with the UL product certification requirements, a LPS (limited power source) power supply must be used for the Intercom Server!
  - For IP installations it is mandatory to install a router in the same rack as the Intercom Server is installed; i.e. IP signals from the Intercom Server may only be transmitted to other IP devices via this router!

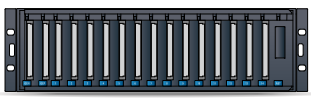
MOUNTING INSTRUCTIONS

- One C-GE800UL.C housing requires 3 height units
- The plug-in cards are inserted into the 19" housing from the front and fixed with the attachment-clips. The corresponding installation boards are mounted at the rear of the Intercom Server (see "Mounting of Cards and Installation Boards").

REMOVING LID

1 ...Press the latches on both sides

2 ...Take off the lid



CONFIGURATION VIA IP

The IP-Addresses of the Intercom Server are defined with the DIP-switches of the G8-GEP. As soon as the Intercom Servers are connected with the network they can be configured via IP.

CONFIGURATION VIA RS 232

For configuration of the C-GE800UL.C a 9-way D-Submin connection cable is required (1:1, plug on Server side, socket on PC side).
This cable is connected to the 9-way D-Submin socket on the front of the power supply card G8-GEN or on the installation board G8A-GEN.

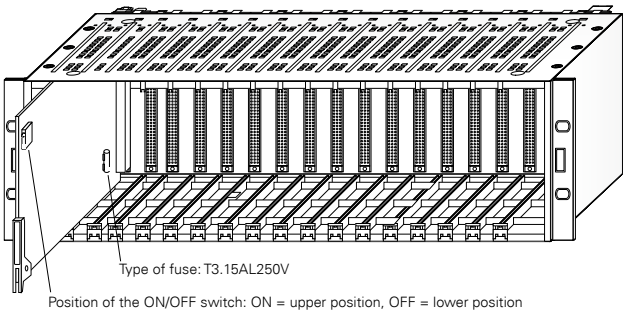
NC	1	———	1
TXD	2	———	2
RXD	3	———	3
NC	4	———	4
GND	5	———	5
NC	6	———	6
NC	7	———	7
NC	8	———	8
NC	9	———	9

GE 800 (9-way D-Submin plug) (9-way D-submin jack) **PC**

NC = not connected
This cable can be purchased at an electric outfitter or ordered under the type "X-KAB-CCT".

ON/OFF SWITCH AND FUSE POSITION

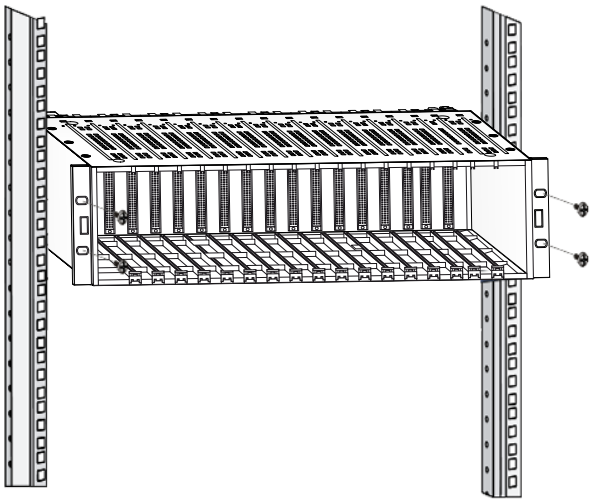
Both the ON/OFF switch and the fuse are located on the G8-GEN card.



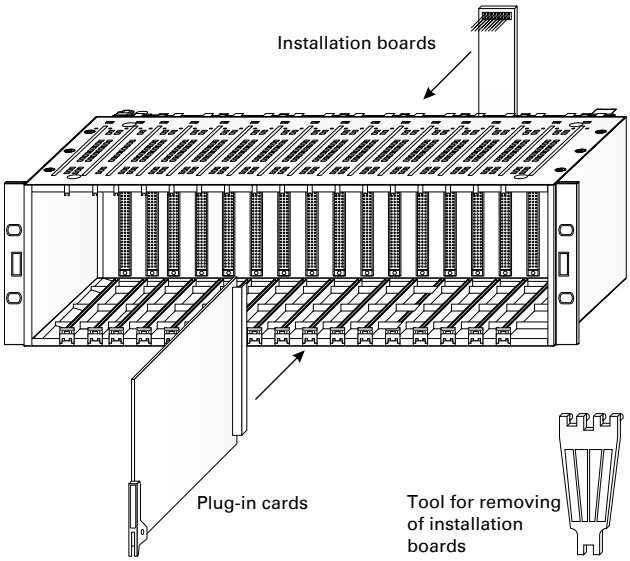
Installation

MOUNTING THE INTERCOM SERVER INTO A 19“ RACK

Depending on the rack specification 10-32, 12-24 or M6 screws have to be used for mounting the C-GE800UL.C into a 19“ rack.

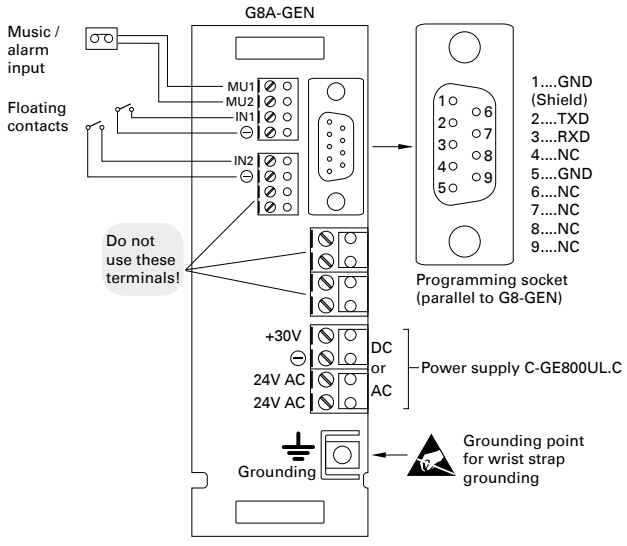


MOUNTING OF CARDS AND INSTALLATION BOARDS



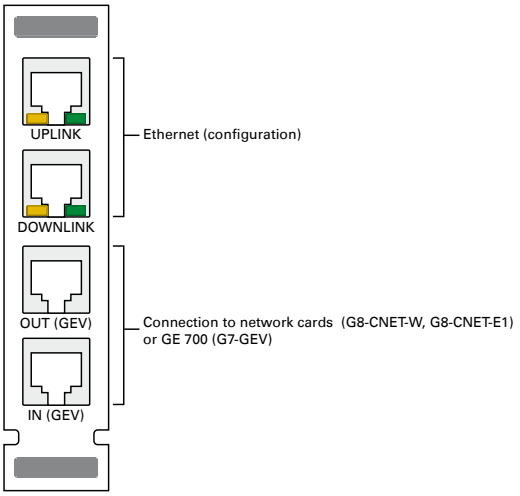
CONNECTION DIAGRAM G8A-GEN

The G8A-GEN is the installation board for the card power supply card G8-GEN and the processor card G8-GEP.



CONNECTION DIAGRAM G8A-NET

G8A-NET is the installation board for the card G8-NET.



Installation

PLUG-IN CARDS FOR C-GE800UL.C

Subscriber cards:
- G8-IP-4B, C, D, P: for four IP-stations
- G8-IP-8B, C, D, P: for eight IP-stations

Interface cards:
- G8-IAX: Interface card for integration of various VoIP-Standards via a IAX-capable Asterisk® server.
- G8-IF: Ethernet Interface card with standard ICX-protocol via Ethernet and two RS 232

Connection card:
- G8-LAN: IP network card for connection of up to 100 Intercom Servers via Ethernet (corresponding to IP protocol).

LICENCES FOR C-GE800UL.C

Subscriber Licences:
- L8-SUB-28C: For feature level upgrade from B to C for 28 subscribers.
- L8-SUB-28D: For feature level upgrade from B to D for 28 subscribers.

Networking Licences:
- L8-NETLAN4: For activation of 4 LAN-connections via G8-NET card.
- L8-NETLAN8: For activation of 8 LAN-connections via G8-NET card.
- L8-NETWAN4: For activation of 4 WAN-connections via G8-NET card.
- L8-NETWAN8: For activation of 8 WAN-connections via G8-NET card.

Interface Licences:
- L8-ICX: For activation of one ICX-Interface (ICX/TCP or ICX/RS232).

Installation

PLUG-IN POSITIONS OF THE CARDS

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

Card type	GEN	GEP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	NET	max. per Server
G8-LAN	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	-	7
G8-IAX	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	14
G8-IF	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	14
G8-IP	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	14
G8-IP-32	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	14
G8-GEN	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
G8-GEP	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
G8-NET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	1

INSTALLATION BOARDS FOR THE PLUG-IN CARDS

The plug-in cards can be used with the following installation boards:

● ...included in extent of supply
❍ ...available separately
X ...via Ethernet sockets of Intercom Server (G8A-NET)

	G8A-V24	G8A-GEN	G8A-NET
G8-LAN	-	-	X
G8-IAX	-	-	X
G8-IF	●	-	X
G8-IP / G8-IP-32	-	-	X
G8-GEN	-	●	-
G8-GEP	-	-	X
G8-NET	-	-	●

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**.

A STRONG WORLDWIDE NETWORK

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

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