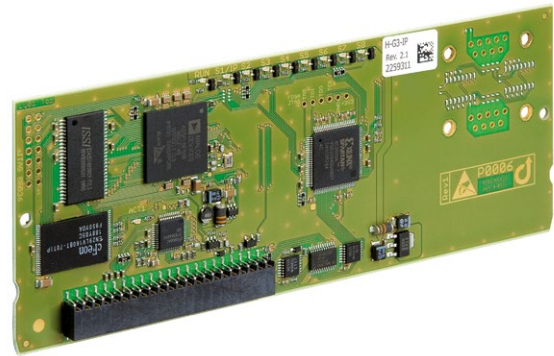
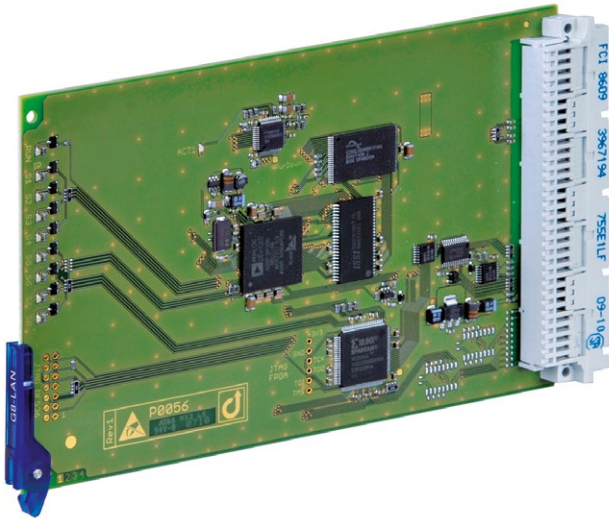


# G8-IP / G3-IP

IP subscriber cards for Intercom Servers GE 800 and GE 300



## The symbiosis of IP and Intercom

With an IP subscriber card G8-IP or G3-IP up to eight Intercom stations can be connected to an Intercom Server GE 800 resp. GE 300 via an IP network.

In order to provide maximum flexibility, it is possible to combine IP Intercom stations as well as digital 2-wire and analogue 4-wire Intercom stations. The IP-subscriber card connects directly to a LAN or WAN network: neither media converters nor multiplexers are required.

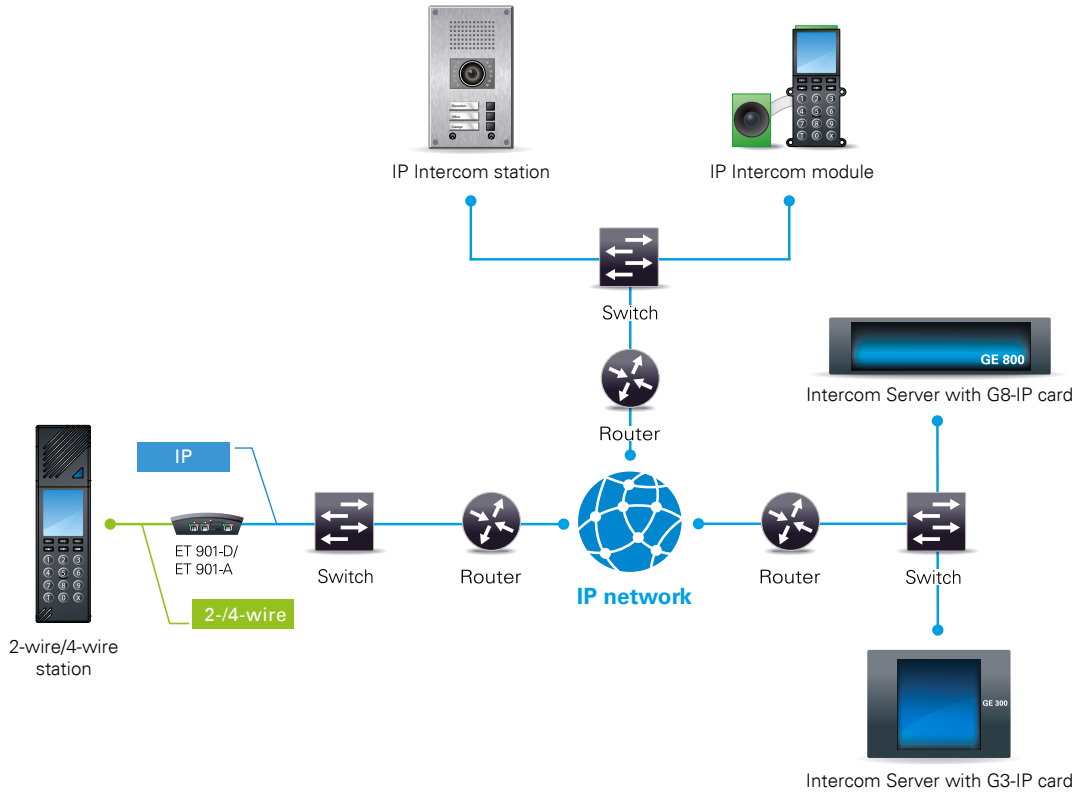
## Features and highlights

- Handles up to 8 Intercom stations through an IP network (LAN/WAN)
- Connects directly to the IP network (LAN/WAN) – no media converters or multiplexers required
- Available with feature levels B, C and D (variable combination possible)
- Intercom systems may include IP (VoIP®), digital 2-wire and analogue 4-wire Intercom stations for maximum flexibility
- Only one public IP address required per Intercom Server
- In standby (no active conversations), only a small bandwidth within the IP network is required
- Best performance in networks with QoS (Quality of Service)
- 16 kHz audio bandwidth
- 8 MB flash for storage for audio recordings

# Product details

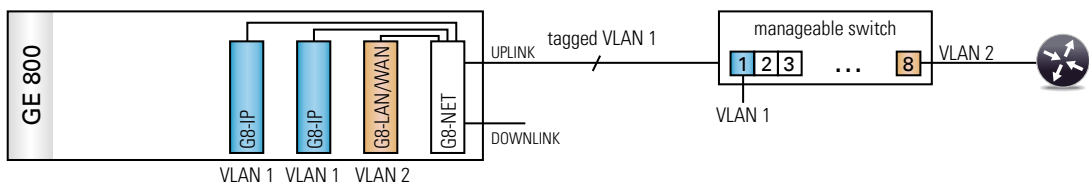
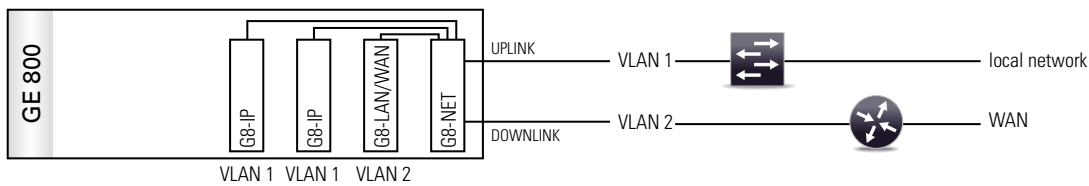
## System overview

The following illustration shows an example for an IP Intercom system:



## VLAN functionality

With the VLAN functionality, the networked Intercom Servers can be protected similar to a firewall. In this way, only the required services or cards can be allowed access to the LAN/WAN.



# G8-IP / G3-IP

## Technical specifications

### Technical data

<b>Operating temperature range:</b>	0 °C to +50 °C (32 °F to +122 °F)
<b>Storage temperature range:</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>Relative humidity:</b>	20% to 80%
<b>Connection:</b>	G3-IP: 40-pin socket card G8-IP: 96-pin PC board connector
<b>Power supply:</b>	from Intercom Server
<b>Emergency power consumption:</b>	50 mAh
<b>Cabling:</b>	min. Cat. 5
<b>Protocol:</b>	IoIP® based on UDP/IP
<b>Data rate:</b>	2 x 10/100 MBit/s (Full/Half Duplex)
<b>Dimensions (W x H):</b>	G3-IP: 60 x 160 mm (2.36 x 6.30 in) G8-IP: 100 x 167 mm (3.94 x 6.58 in)
<b>Weight incl. package:</b>	G3-IP: 140 g (0.3 lbs) G8-IP: 180 g (0.4 lbs)



### System requirements

The following requirements are valid for the IP subscriber cards Gx-IP as of Rev. AC (generation 3 in CCT 800):

#### Intercom Server

- GE 800 (min. PRO 800 3.1)
- GE 300 (min. PRO 800 3.1)

#### Configuration software

- min. CCT 800 3.1

### Network requirements

#### IP addresses and ports

- Each IP subscriber card must have a fixed IP address.
- In case of a changing public IP address, dynamic registration of an IP Intercom station connected to the IP subscriber card is possible.
- The communication from the IP subscriber card to the Intercom Server (UDP protocol) is done via port 16400 (configurable).

#### QoS requirements

- One-way delay max. 100 ms
- Delay-Jitter max. 50 ms
- 0% packet loss for perfect audio quality

#### Bandwidth

- Required bandwidth incl. protocol overhead per IP Intercom station for upload/download speech and data (no video): 96 kBit/s
- Speech is compressed according to the G.722 standard

### Legal notice

The manufacturer guarantees the functionality of its products as described in the data sheets and / or technical documentation. For error-free operation of the Intercom system, faultless transmission paths are mandatory. The functionality of transmission paths, in particular of IP-networks, exclusively is the responsibility of the operating company of the transmission path and therefore the manufacturer can not be responsible in any manner, for errors and problems, which result from problems or malfunctioning of the transmission path.

### Line length in LAN

The maximum line length of Cat. 5 cabling in a LAN is 100 m (328 ft) – e.g. from switch to Intercom station.

### Extent of supply

- IP subscriber card G8-IP-4B (Rev. AC) or G3-IP-4B (Rev. AC)
- Short reference

### Mounting instructions

- When exchanging cards, ESD precautions must be observed.
- Cards may be exchanged only with voltage switched off.
- Mounting and installation of the Intercom Server and of the equipment may only be carried out by authorised service engineers.

### Connection

- The IP subscriber G8-IP card is connected to the network (switch) via the RJ45 jacks "UPLINK" or "DOWNLINK" of the installation board G8A-NET (available separately).
- The IP subscriber G3-IP card is connected to the network (switch) via the RJ45 jack "UPLINK" of the motherboard G3-GEM.

## IP subscriber cards

G8-IP-4B (Rev. AC)	IP subscriber card with feature level B for the Intercom Server GE 800 for connection of 4 subscribers per card (with upgrade licence up to 8 subscribers). A maximum of 112 subscribers per GE 800 is possible.
G3-IP-4B (Rev. AC)	IP subscriber card with feature level B for the Intercom Server GE 300 for connection of 4 subscribers per card (with upgrade licence up to 8 subscribers). A maximum of 40 subscribers per GE 300 is possible.

## Upgrade licences – feature levels

L3-IP-4C	Upgrade licence for G3-IP-4B – upgrade to feature level C
L3-IP-4D	Upgrade licence for G3-IP-4B – upgrade to feature level D
L8-IP-8C	Upgrade licence for G8-IP-4B – upgrade to feature level C
L8-IP-8D	Upgrade licence for G8-IP-4B – upgrade to feature level D

## Upgrade licences – feature levels and 8 subscribers

L3-IP-8B	Upgrade licence for G3-IP-4B – upgrade to 8 subscribers
L3-IP-8C	Upgrade licence for G3-IP-4B – upgrade to 8 subscribers and feature level C
L3-IP-8D	Upgrade licence for G3-IP-4B – upgrade to 8 subscribers and feature level D
L8-IP-8B	Upgrade licence for G8-IP-4B – upgrade to 8 subscribers
L8-IP-8C	Upgrade licence for G8-IP-4B – upgrade to 8 subscribers and feature level C
L8-IP-8D	Upgrade licence for G8-IP-4B – upgrade to 8 subscribers and feature level D

## Upgrade licences – feature level P

L3-IP-4P	Upgrade licence for G3-IP-4B – upgrade to feature level P (variable/mixed feature levels)
L3-IP-8P	Upgrade licence for G3-IP-4B – upgrade to 8 subscribers and feature level P (variable/mixed feature levels)
L8-IP-4P	Upgrade licence for G8-IP-4B – upgrade to feature level P (variable/mixed feature levels)
L8-IP-8P	Upgrade licence for G8-IP-4B – upgrade to 8 subscribers and feature level P (variable/mixed feature levels)

G8-IP-8x/G3-IP-8x with L8-IP-8P/ L3-IP-8P								
Subscriber	1	2	3	4	5	6	7	8
2 x D, 6 x B	D	D	B	B	B	B	B	B
1 x D, 2 x C, 5 x B	D	C	C	B	B	B	B	B
4 x C, 4 x B	C	C	C	C	B	B	B	B

G8-IP-4x/G3-IP-4x with L8-IP-4P/ L3-IP-4P				
Subscriber	1	2	3	4
1 x D, 3 x B	D	B	B	B
2 x C, 2 x B	C	C	B	B

## 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.

[www.commend.com](http://www.commend.com)