

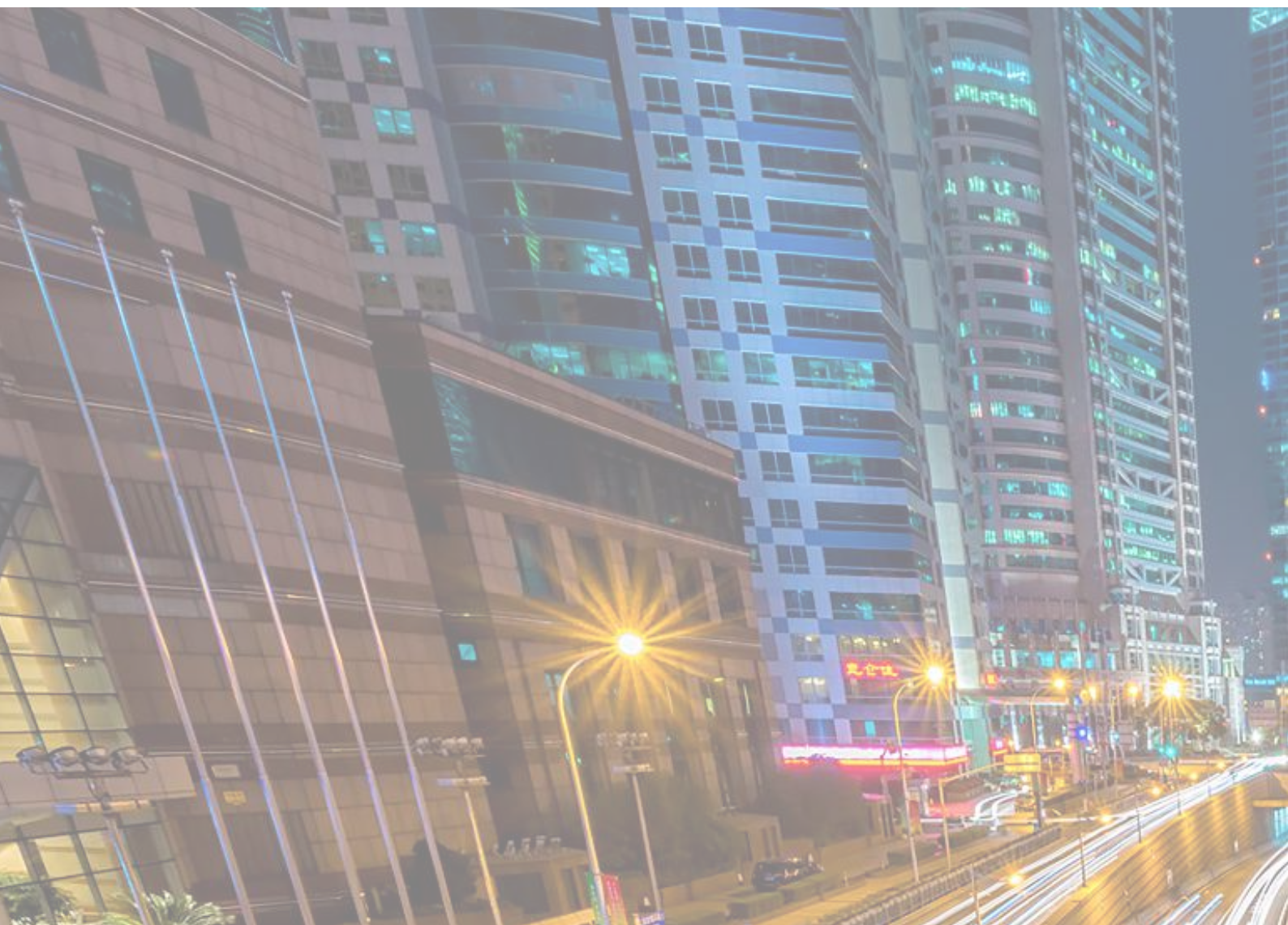
PRODUCT CATALOGUE

FREUND IP-INTEGRA

A WORLD OF INOVATIVE TECHNOLOGY

KEEP YOUR PROPERTY SAFE WITH
FREUND "IP-INTEGRA" DOOR ENTRY SYSTEM SOLUTION

DESIGNED BY:
FREUND ELEKTRONIKA
IP-INTEGRA
PRODUCT CATALOGUE



FREUND ELEKTRONIKA D.O.O

ABOUT US

Freund Elektronika d.o.o is an engineering and development company based on SW and HW development in cooperation with the International Burch University in Ilidza and our Danish sister company Freund Elektronik A/S.

Freund Elektronik A/S, as our Scandinavian channel partner, mainly deals with the distribution and production of electronic products such as:

Intercoms for buildings and commercial buildings

Smart house / Automation systems

School IP audio solutions

IP door entry

Hotel IP telephony solutions

Freund Elektronika d.o.o has the primary contract on the development of Freund Elektronik A/S systems, but also deals with

development activities for other companies as well as the sale and distribution of its own products and products from Freund Elektronik A/S in the market of Bosnia and Herzegovina, Serbia, Croatia and Montenegro.

Freund Elektronika d.o.o is located in the building of the International Burch University in Sarajevo/Ilidza Bosnia & Herzegovina.

Our development department provides easy to use solutions with intelligent design and advanced technology.

We Freund Elektronika d.o.o. can offer an all in one package for your next construction project.

"We are not only a supplier but also a reliable business partner..."

- Jørgen Freund,
Chairman Freund Elektronika d.o.o.



Keep your home or business safe with IP-INTEGRA

Our IP-INTEGRA solution is the to an easy-to-use and smart access control system. This is especially true for companies where it may be important to control who gets access to the company's rooms or buildings.

With IP-INTEGRA, Freund Elektronika has created a complete system that streamlines everyday life and improves service in your property or business.

An IP-INTEGRA SIP server allows you to connect the door entry panel to a mobile phone, which allows you to answer door calls using a mobile app or GSM call.

With the app, you can then access the building via your smart phone, tablet or computer.

That is, you are not dependent on being somewhere physical. With IP-INTEGRA you can answer calls, wherever you are.

INTEGRA VoIP apps can be downloaded for free in Appstore and Google Play

IP-door entry for all

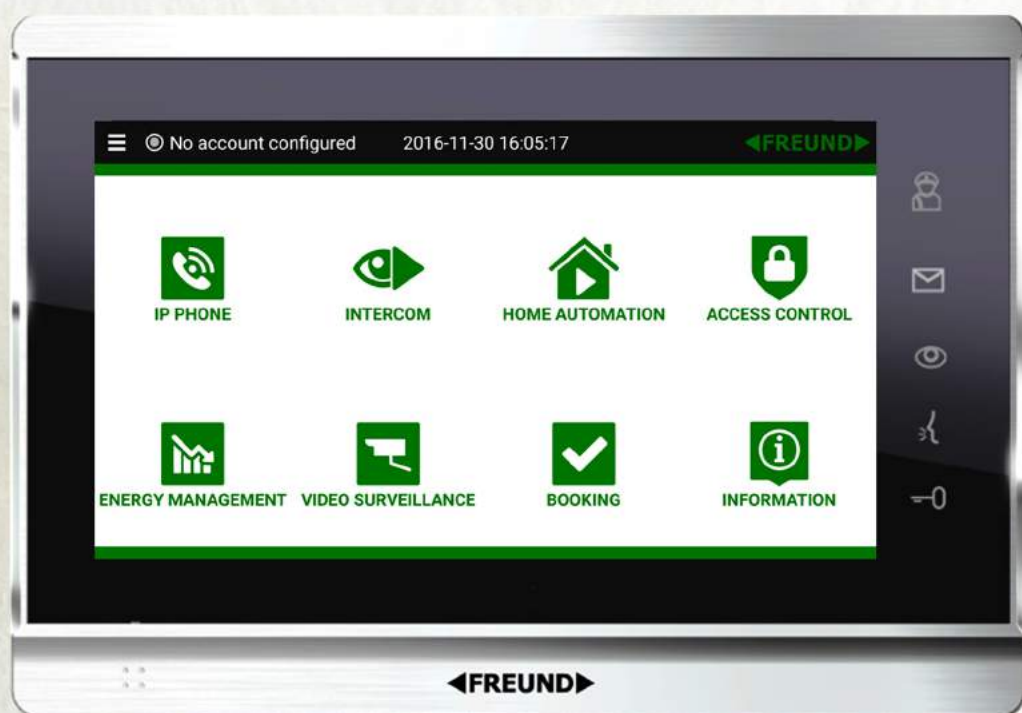
IP-INTEGRA can be tailored to individual solutions and meet various needs such as letting cleaning assistance into the home while you are on work or vacation abroad.

At the same time, it may work with a password or key card as a professional access control system. This IP solution is especially useful for companies as it improves workplace safety and reduces administrative costs.

The installation is very easy, as the physical connection is simple. A PoE switch or SIP server is sufficiently depending on the features you want, such as. call forwarding.

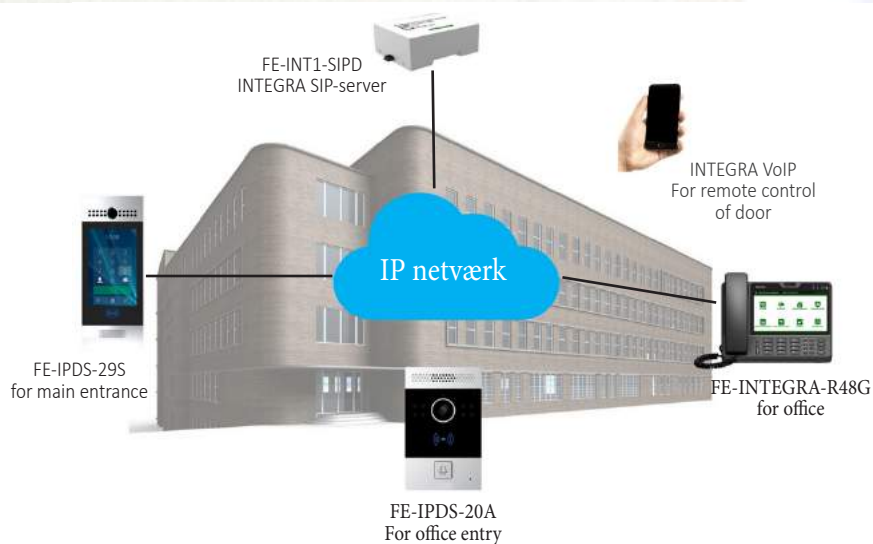
The built-in camera ensures that users can see all visitors coming in or trying to break into the building at any given time.





How does it work?

When the doorbell is activated, a video and audio connection is automatically created between the door panel and the connected IP-terminal video phone or mobile phone. If no-one is home, calls will be forwarded to your INTEGRA VoIP app or GSM phone.



The camera can also automatically record a video if someone is calling or moving near the door entry panel. An IP-INTEGRA door panel camera can also be connected to a video surveillance server as an additional IP camera.



FREUND

IP-INTEGRA

Integration with third party IP/TCP devices and systems.



INTERCOM



ACCESCONTROL



HOME AUTOMATION



BOOKING



VIDEOSURVEILLANCE



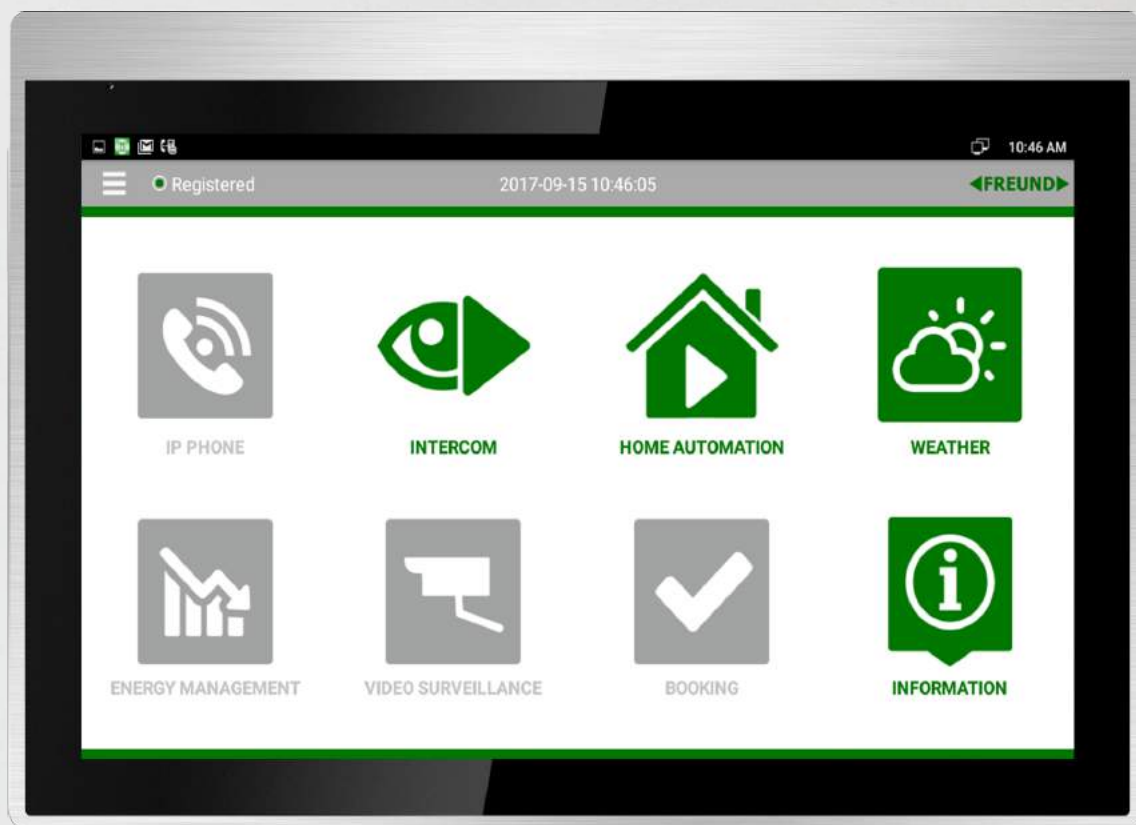
INFORMATION



VEATHER



ENERGY
MANAGEMENT



**ALL SYSTEMS
INTEGRATED IN
ONE SCREEN**

OUT DOOR ENTRY PANELS



FE-IPDS-29S

With Freund's smart IP video door entry panel, you can easily monitor doors and gates, making you feel safe in your home or business.

IPD-29S comes with a built-in 7" display, uses the latest IP technology to control the entrance and is powered by touch display, camera and chip reader.

The door entry panel can contain up to 1000 names, so this door entry panel is the only door panel you need, regardless if you have a 2-storey apartment or a large apartment building!

In addition, the door entry panel has a built-in PIR detector, which means that the display is only active when there are guests approaching the door entry panel as well as a light sensor, which also makes it possible to make calls in the dark.

The IPDS-29S also includes a "forward call" feature if you are not at home: it can forward calls in a particular order to one or more mobile phones, allowing the front door to be remotely monitored and controlled even if no one is at home.

- Surface mount and flush mount
- 1000 destinations
- Premium audio and video quality
- Enables IP A/V communication to an IP mobile
- Remote Door access control
- Card reader and numeric keypad for residents
- Choose from name list (up to 1000 names) and / or numeric keypad
- Light sensor with 8 diodes for call in the dark
- PoE
- Wiegand control reader
- 3 passive relays



FE-IPDS-27S

The R27A is a fashionable SIP-enabled IP video door entry with an RF-card reader and a numeric keypad. The built-in IP camera makes it easy to monitor inputs at the same time that it is easy for the user to control access.

With the smart audio and video surveillance of doors/gates, the user gets the opportunity to see and talk with guests and then decide whether to open. This increases the security of residential and commercial real estate.

The device has also a built-in card reader with Wiegand protocol, which can be easily used standalone, but it can also be interfaced with third party access control systems. In addition, the 3 integrated relays also allow remote control of the door or doors so that the user can let people even if he/she is on the go.

- Surface mount and flush mount
- 1000 destination
- Premium audio and video quality
- Real-time input control
- Remote Door
- RF card reader and numeric keypad
- Compliance with ONVIF
- PoE
- Wiegand control reader
- 3 passive relays

OUT DOOR ENTRY PANELS



Feel safe in your building

FE-IPDS-20A

Freund's smart SIP enabled video door entry panel with an RF-card reader and compact design gives you increased security by making it possible to confirm, both verbally and visually whom you are letting into your building. The camera runs 24/7, allowing you to monitor doors and gates in real time at any time of day. With Freund's IP Video Door entry system you will always feel secure in your building.

The FE-IPDS-20A provides high quality video and audio using the latest H.264 video and G.722 audio codecs. Furthermore, the quick response time after user authentication makes it easy for guests and delivery services to access the building with minimal waiting time.

Freund's IP video door entry system equips you with all the essentials in door communication - all in a smart compact design!



**NEVER MISS A DOOR CALL WITH
INTEGRA VOIP APP**

- Surface mount and flush mount
- Premium audio and video quality
- 24/7 real-time camera- not just during calls
- Integrated RF card reader
- High strength LED camera light for night monitoring
- PoE
- Card reader

A child is lying on a brown herringbone-patterned sofa, wearing a pink long-sleeved shirt and pink pants. A small brown dog is lying next to the child, and a large pink stuffed rabbit is at the bottom of the frame. The background is a blurred indoor setting.

FEEL

SAFE

WITH

FREUND

IP-INTEGRA

FREUND INTEGRA INDOOR PANELS

INDOOR PANELS

Installation is carried out easily and quickly, and high-quality audio and video communications are guaranteed through the latest SIP and video protocols. At the same time, integration is offered with three-way IP / TCP devices and systems such as: IP telephony, booking, access control, home automation, video surveillance and information systems.

The INTEGRA terminals also feature an elegant design with the 7" or 10" LCD touch screen and soft touch function buttons. The integrated IP technology gives you endless options for receiving calls from visitors. If no-one is home, calls to an INTEGRA terminal can be automatically forwarded to one of your other devices- you will never miss calls from visitors.

Freund Elektronik d.o.o. focuses on our clients, so INTEGRA terminals can be adapted to your needs. User Interface, logo and design can be tailored to you. You are always welcome to contact our technical department and get a solution perfect for your wishes and needs.



FE-TERM-7P

FE-TERM-10P

Also available in light version FE-TERM-TPL



SAFETY AND COMFORT IN YOUR HOME

- Premium class in a sleek design and stylish look
- 7 "or 10" capacitive touch screen with power save mode
- Can accept the latest video H.264 and Audi G.722 code
- Receiving an HD image from the door station and an external IP camera at the same time
- Integration of third-party systems over a web server (energy consumption monitoring, booking infoterminal, smart home, etc.)
- PoE (IEEE802.3af, Power-over-Ethernet) ie no external adapter
- Easy and practical wall mounting with almost no distance. Mounting bracket included
- Does not require much technical understanding of IP/SIP or network
- Autoprovisioning through INTEGRA SIP server

NOT JUST AN ANDROID VIDEOPHONE



FE-TEL-48G

The FE-TEL-48G is a SIP based Android INTEGRA IP video phone for businesses of all sizes with a 7" touch screen, a 2M CMOS camera sensor and Android operating system. This multi-media terminal brings together various services for business settings, including HD audio and video calling, Internet browsing, daily information displays, and individualized business applications imported from a mobile phone.

In a single screen, communication efficiency, enterprise productivity, and tailor-made workflow becomes invaluable.



- Can run IP telephony and IP door entry in parallel
- 7 "capacitive touch screen with power saving mode
- Gather services like personalized business applications, daily information and internet browsing
- Receiving an HD image from door station and an external IP camera at the same time
- Integration of third-party systems through a web server (monitoring of energy consumption, booking, infoterminals, etc.)
- PoE (IEEE802.3af, Power-over-Ethernet), ie. no external adapter
- Quick connection to SIP server and door station (autoprovisioning). Does not require much technical understanding IP / SIP or network

CORPORATE COMMUNICATION AND REMOTE CONTROL OF DOORS WITH MORE.

FE-SPK-IP2

You can never be too careful about who you close in. The correct door station is therefore essential.

With Freund's fixed door station you can easily control, who gets shut in with the smart built-in camera and loudspeakers, and thereby feel safe in your building.

The IP terminal is fully integrated into the IP network, so you get complete control over your entrance. It has a speaker with a special membrane for optimal sound quality and external 10W audio output for an additional passive speaker. The single-button on the IP terminal is ideal for areas with special access rights and transit areas.

The system do all this and more with its:

- IP network connection
- Standard-based implementation
- Full-duplex sound

- Premium speaker
- High voice quality
- Timeless design suitable for any workplace
- Clean easily
- The volume can be easily adjusted using remote control or web-interface
- Single-button design ideal for access points and transit areas
- PoE (IEEE802.3af, Power-over-Ethernet), ie. no external adapter
- Input for connecting 2 passive speakers of 5W each



INTEGRA VoIP

Never miss the door call with **INTEGRA VoIP**

- Easy to Install & Manage
- Get instant alerts as soon as somebody press your doorbell
- Speak from everywhere to anyone at your front door
- Our integrated SIP-server gives possibility of installing extra surveillance cameras from any manufacturer
- With Integra VoIP and extra cameras you can see every corner of the house, every angle at the porch
- Very fast wakening of your phone
- Let your visitors in, even if you are not at home
- Download at: itunes.apple.com and here at: Google Play

Support from Freund's skilled technicians is not just about solving the problems that may arise it is including all changes to IP solution and setup.



It is very important that communication lines always work and suit your needs and therefore we are not just a supplier but also a business partner.

FREUND IP-INTEGRA SIP-SERVER

IP-INTEGRA SIP-SERVER WITH OPORTUNITIES FOR INTEGRATION OF IP-DOOR LIFE, IP-DOOR ENTRY, IP-CALENDAR WITH BELL CLOCK TO SCHOOLS AND INSTITUTIONS

Freund Elektronika d.o.o. has developed the smart Linux-based IP Integra SIP server, which allows the customer to integrate the server with IP door entry, IP telephony & IP calling systems with ringbells for schools and institutions & patient call centers. Additionally, the server also includes a feature so that the customer can integrate the system with nursing and hospital shelters and third party PBX.

With our customers in focus, we have also developed the server to enable system customization and OEM development, as well as being able to scale to larger systems with 1024 parallel calls and an infinite number of clients.

The system can also be expanded and adapted to customer needs by purchasing additional features. Integra SIP server can be used for offices, private homes, institutions and large residential complexes.

FE-INT1-SIP(D)

IP-INTEGRA SIP/DHCP-server



FE-INT2-SIP

IP-INTEGRA SIP/DHCP-server
& scheduler



FE-NANO-SIP

IP-INTEGRA SIP/DHCP-server



OUT DOOR PANELS

FE-IPDS-29S



TECHNICAL INFORMATION

- Size: 317x130x23mm (HxWxL)
- Weight: 1.34kg
- Material: Aluminium
- Display: 7" IPS LCD
- Screen: 7" touch screen
- Camera: 5 megapixels, IR-LED auto lightning
- IR-sensor
- 12V DC connector
- Water and dust repellent: IP65
- Collision resistant: IK06

SIP-KLIENT

- SIP v1(RFC2543), SIP v2(RFC3261)
- Audio codeks: G.711a, G.711μ, G.722
- Video codeks: H.263, H.264
- Echo cancelation
- Voice Activation Detection
- Comfort Noise Generator

NETWORK

- 10/100 Mbps ethernet connection
- DHCP Client or Static IP
- Network-Time-Protocol

VIDEO

- Resolution: up to 1080p
- Max transfer rate for pictures: 1080p - 30fps
- High intensity white LEDs around camera for illumination with internal light sensor

POSSIBLE USES

- Office door station with on-site or hosted IPPBX with employee list
- Extern door control over Internet
- Stairway door or main gate in floor buildings
- Company informations, logo or address information

ENTRANCE DOOR FUNCTIONALITY

- ENTRANCE DOOR FUNCTIONALITY
- 3x internally passive relays for management of one door opener and light in entryway
- Relays controlled individually by DTMF-tones or through web
- SIP-messages
- Multifunctional doorway: IC-card or code
- G-sensor for protection alarm
- Dynamic speaker volume control
- Volume control for microphone
- Wiegand port (in+out)
- Camera is always operational, not only during the call and can be used for video-monitoring (can be switched off)
- White balance: auto
- Viewing angle: 72 °
- Automatic shift to night settings with IR-LED-volume
- Min. functional lighting: 1LUX (without LED illumination)
- Max. call length setup
- PoE IEEE802.3af

FE-IPDS-27S



TECHNICAL INFORMATION

- Material: Aluminium
- Camera: 3 megapixels, with automatic volume
- Keypad: up, dial and down
- RF-card reader: 13.56MHz and 125 kHz
- PoE IEEE802.3af
- Power consumption: 12V DC input, <12W
- G-sensor for tamper alarm
- Supports infrared sensor
- Enclosure: IP65
- Installation: Surface or flush mount
- Size: 280x130x68 mm.

SIP-KLIENT

- SIP v1(RFC2543), SIP v2(RFC3261)
- Audio codeks: G.711a, G.711μ, G.722
- Video codeks: H.263, H.264
- Echo cancelation
- Voice Activation Detection
- Comfort Noise Generator

INTERFACE

- 1xRJ45 10/100M Mbps Ethernet port
- Output relay: 3 output relays to doorway
- Door opener via DTMF + web
- RS485 port
- Wiegand port (in+out)

NETWORK

- Static IP eller DHCP
- 802.1Q VLAN
- NTP to auto time adjustment

AUDIO

- 1 built microphone med IP67 rating and 2W speaker with IP66 rating
- Codeks: G.711a, G.711μ, G.722 og G.729
- Echo cancelation
- Voice Activity Detection
- Comfort Noise Generator

ADMINISTRATION

- Auto-provisioning:
- FTP/TFTP/HTTP/HTTPS/PnP/DHCP
- TR069
- SNMP

VIDEO

- Resolution: up to 720p
- Transfer speed for pictures: 720p@30fps max.
- Camera is always operational (can be switched off)
- Automatic shift to night settings with LED-volume
- Illumination: 0.1LUX min.
- Auto white balance
- Internal light sensor: image lighting when it's dark
- Codeks: H.264, MPEG-4 and MJPEG
- Supports live stream and RTSP
- Compatible with ONVIF

FE-IPDS-20A



TECHNICAL INFORMATION

- Material: Aluminium
- Camera: 3 megapixels, auto-LED volume
- Button: 1 call button
- G-sensor: Support
- Infrared sensor: Support
- RS485: Support
- RF cardreader: 13.56MHz & 125kHz
- Output relay: 2 output relays for 2 door openings
- 802.3af Power-over-Ethernet
- 12V DC connector (if PoE isn't used)
- Water and dust repellent: IP65
- Installation: Wall
- Surface and flush mount

SIP-CLIENT

- SIP v1(RFC2543), SIP v2(RFC3261)
- Audio codecs: G.711a, G.711μ, G.722, G.729
- Video codecs: H.264
- Voice quality: 7kHz Audio
- Echo cancellation
- Voice Activation Detection
- Comfort Noise Generator

NETWORK

- 1x10/100 Mbps Ethernet connection
- Protocol support: IPv4, HTTP, HTTPS, FTP, SNMP, DNS, NTP, RTSP, RTP, TCP, UDP, ICMP, DHCP, ARP

VIDEO

- Resolution: up to 720p
- Max picture transfer rate: 720p - 30fps
- High intensity white LEDs around camera for illumination with included internal light sensor
- Compatible med third party video components e.g. NVRs

POSSIBLE USES

- Office door phone with on-site or hosted IP-PBX
- Extern door control over Internet
- Stairway door or main gate in floor buildings

ENTRANCE DOOR FUNCTIONALITY

- Relays controlled individually by DTMF-tones + web
- Camera is always operational (can be switched off)
- White balance: auto
- Automatic shift to night settings with LED-volume
- Min. functional volume: 0.1LUX

FE-BELL-IP2



NETWORK & PROTOCOLS

- Protocols: IPv4 (with DiffServ), SIP, TCP, UDP, HTTP,
- RTP, DHCP, SNMP, NTP
- LAN protocols: PoE (IEEE 802.3at) Network Access
- Control (IEEE 802.1x)
- Service & driving: HTTP (Web configuration)
- DHCP and static IP, remove software upgrade
- Centralized monitoring
- Advanced monitoring functions: f.eks. NETWORKstest, tone test, status-report
- SIP-support: RFC 3261 (SIP-base standard) RFC 3515 (SIP-refer) RFC 2976 (SIP-info), SIP-using TLS, RFC 5630 SIPS
- URI scheme
- DTMF-support: RFC 2833, 2976 (SIP info)

HARDWARE

- Ethernet connector: 1 x RJ 45
- Power options: PoE and/or External
- 5V/1,5A DC
- PoE : IEEE 802.3at standard, Class 0 (0.44W to 12.95 W)
- Extern power supply: 12 VDC
- Power consumption: Idle 1.8W, max 25W (depending on volume)
- Backlight to knap: LED
- Call indicator: icons/colours to weakened hearing
- Open door indicator: Icons/colours to weakened hearing
- CPU: Allwinner H2+, Quad-core Cortex A7

MATERIAL

- Size: 160x160x29,5 mm
- Size after incorporation: 60x160x29.5 mm
- Weight: 500 gram
- Front plate Material: Polyamide
- Base/frame Material: Polyamide
- Screwing material: steel plate
- Key material: Polyamide

AUDIO

- PL rated power: 95 dB
- Codeks: G.711, G.722, GSM-FR
- Internal speaker amplifier: 2x10W class
- Microphone technology: condenser microphone
- DSP: Support echo cancelation and noise stoppage
- Speaker impedance: 8Ω

ENVIRONMENT

- Operating Temperature: 0°C to 40 °C
- Storage Temperature: -40°C to 70°C
- Humidity: 10% to 95%, no dew

OTHER SPECIFICATIONS

- GPIO : 4 programmable output pins
- Microphone: 1 onboard connector
- LCD-extension: Support SP-mode (adjustable)

HOME TERMINALS

FE-TERM-7P



TOUCH SCREEN DISPLAY

- Display options: Black, transmissive
- LCD-Size: 7 inches (diagonally)
- Screen ratio: 16:9
- Resolution: 800x480
- Contrast: 400:1
- Brightness: 240nits (cd/m²)
- Viewing angle: $\pm 60^\circ$ horizontal, $\pm 70^\circ$ vertical
- Touch Screen

UNIT SIZE

- Size (W x H x D): 232 x 160 x 21 mm

MEMORY

- RAM: 2GB
- Flash: 4GB

SIP

- SIP v1 (RFC2543), SIP v2 (RFC3261)
- Linje: 2 SIP-accounts

ENVIRONMENT

- Temperature: 14° to 112°F (-10° to 45°C)
- Humidity: 10% to 90% (non-condensing)

POSSIBLE USES

- Villas & apartments
- Home automation
- Booking
- Energy monitoring

INTERFACE

- RS485: 1 RS485 port
- Memory input: 1 micro SD-map
- RJ-45x2

COMMUNICATION

- Ethernet: 2x10/100 Mbps porte, auto-switching, autodiscovery, auto-negotiating, DHCP, full/
- Compatible med IEEE802.3af

VIDEO

- Streaming Formats: H.264

AUDIO

- Built microphone and speaker
- Codeks: G.711a, G.711 μ , G.722 and G.729
- Echo cancellation

FE-TERM-10P



TOUCH SCREEN DISPLAY

- Display options: Black, transmissive LCD-Size: 10 inches (diagonally)
- Screen ratio: 16:9
- Resolution: 1280x800
- Contrast: 800:1
- Brightness: 350 cd/m²
- Viewing angle: $\pm 89^\circ$ left, $\pm 89^\circ$ right,
- Viewing angle: $\pm 89^\circ$ over, $\pm 89^\circ$ under
- Touch Screen

UNIT SIZE

- Size (W x H x D): 251 x 182.5 x 22 mm

MEMORY

- RAM: 2GB
- Flash: 4GB

SIP

- SIP v1 (RFC2543), SIP v2 (RFC3261)
- Line: 2 SIP-account

ENVIRONMENT

- Temperature: 14° to 112°F (-10° to 45°C)
- Humidity: 10% to 90% (non-condensing)

POSSIBLE USES

- Villas & apartment
- Home automation
- Booking
- Energy monitoring

INTERFACE

- RS485: 1 RS485 port
- Memory input: 1 micro SD-map
- RJ-45x2

COMMUNICATIONS

- Ethernet: 2x10/100 Mbps port, auto-switching, auto discovery, auto-negotiating, DHCP, full/half duplex
- Compatible med IEEE802.3af

VIDEO

- Streaming Formats: H.264

AUDIO

- Built microphone and speaker
- Codeks: G.711a, G.711 μ , G.722 and G.729
- Echo cancelation

FE-TERM-7PL



TOUCH SCREEN DISPLAY

- Display tostand: Active matrix TFT, transmissive type
- LCD-Size: 7 inches (176 mm) diagonally
- Screen ratio: 16:9
- Resolution: 1024x600
- Contrast: 800:1
- Brightness: 300nits (cd/m²)
- Viewing angle: $\pm 70^\circ$ horizontal, $\pm 70^\circ$ vertical
- Touch Screen

UNIT SIZE

- Size (W x H x D): 200 x 132 x 17,5 mm

MEMORY

- RAM: 1GB
- Flash: 4GB

SIP

- SIP v1 (RFC2543), SIP v2 (RFC3261)
- Line: 2 SIP-konti

ENVIRONMENT

- Temperature: 14° to 112°F (-10° to 45°C)
- Humidity: 10% to 90% (non-condensing)

POSSIBLE USES

- Door phone

INTERFACE

- RS485: 1 RS485 port
- RJ-45x2

COMMUNICATION

- Ethernet: 2x10/100 Mbps port, auto-switching, auto discovery, auto-negotiating, DHCP, full/half duplex
- Compatible med IEEE802.3af

VIDEO

- Streaming Formats: H.264

AUDIO

- Built microphone and speaker
- Codeks: G.711a, G.711 μ , G.722 and G.729
- Echo cancelation

FE-TEL-48G



FEATURES

- 7" Touch Screen
- Display: TFT LCD, 1024*600 pixels, 16:9 aspect ratio
- LED-light: 1 power light, 1 NETWORKs light and 1 message light 28 taster & RK3288 chip set
- Camera: 1.3 megapixel CMOS-sensor, free rotation
- PoE IEEE802.3af
- RF-module: 868MHz or 433MHz
- Power adapter: input-AC 100~240V, output-DC 12V/1A
- Power consumption: ca.12W
- Local phone book: up to 3,000 groups
- Call log: 600 registered
- Android controlled system 5.1

UNIT SIZE

Size (W x H x D):
106 mm
1.4kg

MEMORY

- 2 GB DDR3
- Flash: 8 GB

SIP

- SIP v2 (RFC3261)
- Line: 6 SIP-konti

INTERFACE

- 2xRJ45 10/100/1000M Ethernet ports
- Bluetooth
- Trådløs: 802.11b/g/n
- 1xUSB flash drive 2.0
- 1xRJ9 handset
- 1x3.5mm headset plug
- 1xHDMI video output port
- 1xHDMI video output port

VIDEO

- Codecs: H.263 and H.264
- Solution: QCIF, CIF, VGA, 4CIF and 720P
- Bitrate: 64kbps-2Mbps
- Adaptive bandwidth adjustment
- Pictures: JPEG, GIF, PNG and BMP
- Other features: PIP, full-Screen and local video ON/OFF control

AUDIO

- Wideband codecs: G.722
- Narrowband codecs: PCMA, PCMU, G.723 and G.729
- Echo cancellation
- Voice Activity Detection
- Comfort Noise Generator
- Full-duplex medhør
- DTMF mode: RFC2833, In-Band, SIP INFO og Auto

ENVIRONMENT

- DriftsTemperature: 32~104°C(0~ 40°C)
- Storage Temperature: -4~158°C(-20 ~ 70°C)
- Humidity during power: 10% ~90% (not-condensing)
- Humidity during storage: 10% ~ 90% (non-condensing)

NETWORK

- UDP/TCP/IP
- RTP/RTCP
- ARP/RARP
- HTTPS
- NAT traversal: static NAT configuration, SIP Keep Alive
- IP-assignment: staticIP, DHCP or PPPoE
- NTP to auto time adjustment
- Network Packet Capture
- TFTP/FTP/HTTP/HTTPS client API
- QoS: Layer 2 (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ)
- MD5 and MD5-sess based authentication

ADMINISTRATION

- Firmware local update: USB flash disc method
- Firmware remote update: FTP method
- Auto provisioning: FTP/TFTP/HTTP/HTTPS
- System log export support
- Reset to factory settings support
- Configuration management: touch Screen-based management
- Multi language support
- 3rd-parts Android applications-support
- Phone directory: Intelligent search method
- LDAP

FE-INT1-SIP(D)INTEGRA SIP/DHCP-server



TECHNICAL INFORMATION

- Freund INTEGRA SIP server in DIN-BOX version with DIN-BOX PS
- Linux-based INTEGRA SIP server with options for integration of IP-doorstations, IP-telephony, IP paging systems and access control
- Opportunity for system adjustment and OEM development as well extending two major systems with up to 1024 parallel calls and infinite number of clients
- "Trunk" option (external call)
- Up to 16 simultaneous calls and infinite number of clients ARMv7 Cortex-A53 64bit Quad Core Processor like a Single Board 1.2 GHz Computer
- There can be added extra number of clients as well as video functionality above the basic functionality, which includes 4 clients and audio SIP interface
- USB dongle for system backup & licensing
- Remote access possible
- Option to send video call outside LAN

FE-INT2-SIP INTEGRA SIP/DHCP-server & scheduler



TECHNICAL INFORMATION

- Freund INTEGRA SIP server based on Intel Atom z3735f processor, 2GB DDR3 RAM and 32GB eMMC SSD
- Linux-based INTEGRA SIP server two medium and large projects with options for integration of IP doorphones, IP telephony and IP-paging systems with ringbells for schools and institutions, and as a special choice paging of patients of nursing homes and hospitals
- Opportunity for system adjustment and OEM development as well extending two major systems with up to 1024 parallel calls and infinite number of clients
- Up to 256 simultaneous calls and infinite number of clients
- There can be added extra number of clients as well as video functionality above the basic functionality, which includes 4 clients and audio SIP interface
- USB dongle for system backup & licensing
- Remove access possible
- "Trunk" option (external call)
- Option to send video call outside LAN

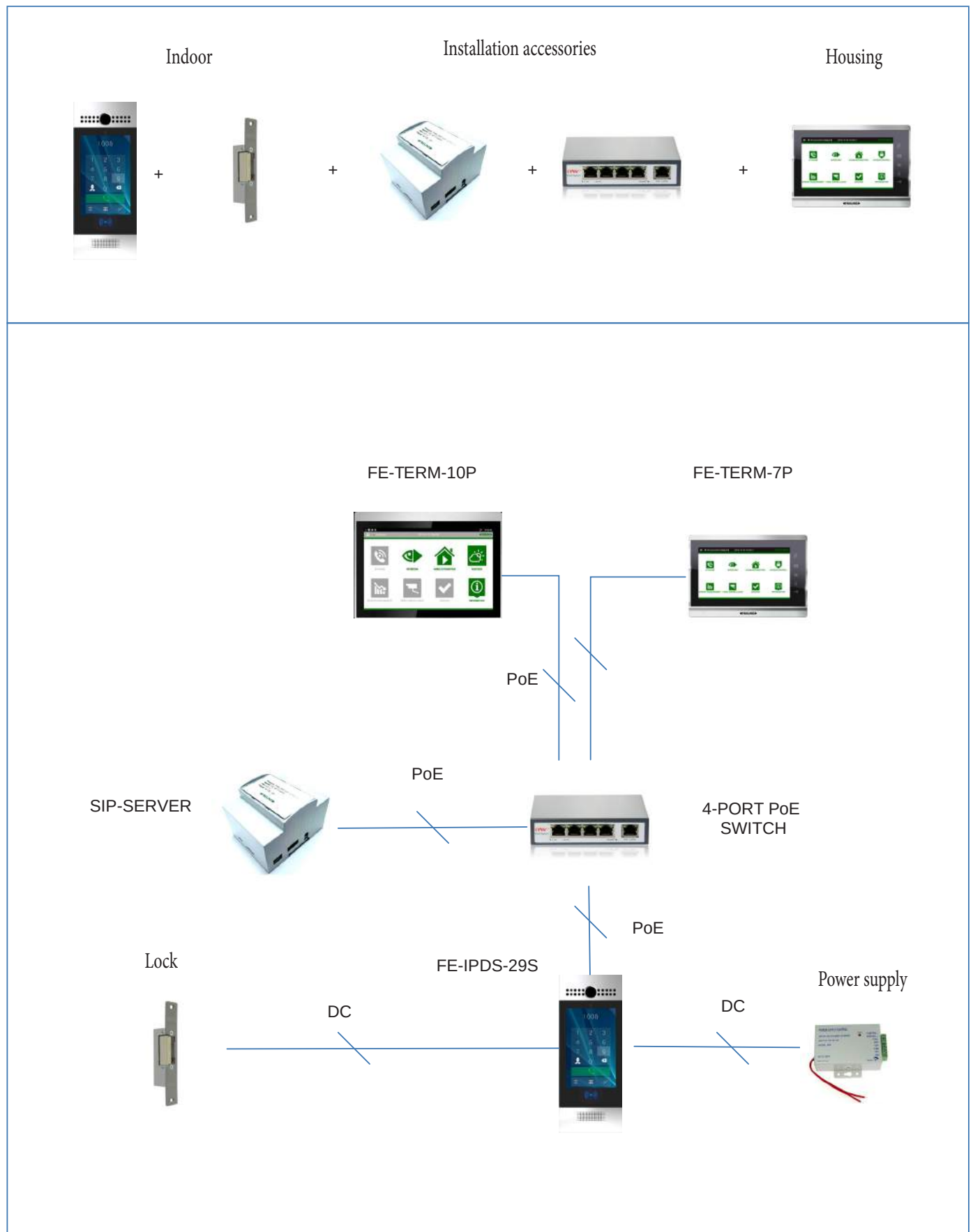
FE-NANO-SIP INTEGRA SIP/DHCP-server & scheduler



TECHNICAL INFORMATION

- Freund INTEGRA NANO SIP server in mini-box version (56x51x32 mm)
- Linux-based INTEGRA SIP server with options for integration of IP-doorstations, IP-telephony, IP paging systems and access control
- Up to 4 Clients and 1 Trunk (Calls to GSM or Landline)
- "Trunk" option (external call)
- ARH3 Quad-core Cortex-A7 H.265/HEVC 4K
- Video functionality can be purchased on top of the basic functionality, which includes 4 clients and audio SIP-interface.
- System backup & license on SD card
- Remote access possible
- Option to send video call outside LAN

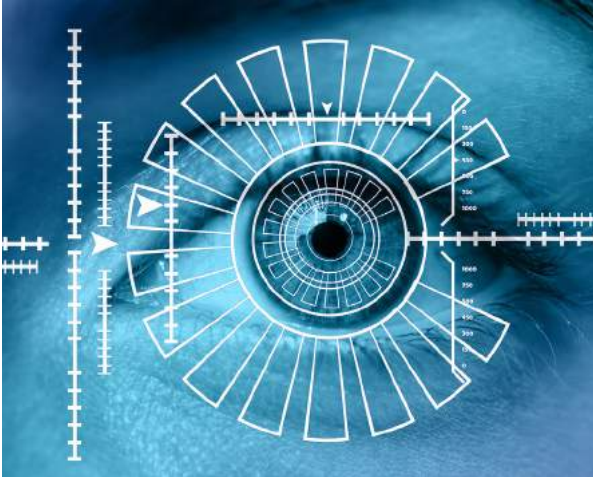
INTEGRA-IP door telephone system-components



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SUPPORT

TECHNICAL HELP
Easy and convenient!



At Freund Elektronik d.o.o we offer technical assistance to our customers, so you get the most out of your IP solution.

TEAM FREUND



The latest IP technologies are used to open up the opportunity for full integration over IP / TCP.

For our customers, it's more or less a Plug & Play solution. If, however, our support is needed, we will be ready to support our customers and partners across TeamViewer or on-site.

We offer technical help for configuration so that you get the optimum out of your IP solution.



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