



**BOSCH**

Invented for life

Inform. Impress. Inspire.  
DICENTIS Conference System





## Conference Systems by Bosch

For over 130 years, the Bosch name has been synonymous with innovation, quality and reliability. Building on true world-class expertise, Bosch Security Systems has led the conference market for over 65 years. How? By fulfilling customer needs with outstanding products, and the promise of continuing to do so for many years to come.



The market for conference solutions has changed rapidly in recent years, with a trend away from standalone systems towards fully integrated solutions. In these integrated solutions, information such as audio, video, social media and meeting data is

shared over standardized infrastructure and interfaces. This in turn has created higher demands on flexibility in system design and the ability for remote interaction. These trends highlight the need to maximize meeting efficiency and increase ease of integration with third parties.

Bosch is committed to deliver the most innovative conference platform to fulfill current and future market needs. This is why Bosch introduced its IP-based product family: DICENTIS. DICENTIS is a revolutionary platform for the integrated conference world of tomorrow.

The DICENTIS conference solution is ideal for a wide variety of uses, from small-sized organizations to multinational corporations, as well as local to national governments and international summits.



Today, more is required from a conference system. It must support video, social media, remote interaction and expandability.







**OMNEO** **Dante™** **OCA™**  
OPEN CONTROL ARCHITECTURE

## The system that grows with your needs

### Inform. Impress. Inspire.

- ▶ Open platform based on the OMNEO media networking architecture for system flexibility and cost-effective installation and maintenance
- ▶ Easy integration with supporting systems to provide features such as automatic camera control
- ▶ License-based expandability for a future-proof system that can easily take on new functionality
- ▶ Optimized user experience to maximize meeting efficiency
- ▶ Simultaneous interpretation of up to 100 languages
- ▶ Cable and power supply redundancy to ensure meetings are held without system interruption

#### Future-proof via system flexibility

No matter how your organization changes, your DICENTIS Conference System will adapt to answer your evolving needs. That's because DICENTIS is built on open standards that make the integration of several technologies possible, even third party solutions. For example:

- ▶ Ethernet and IP are used so existing infrastructures can be reused
- ▶ OMNEO is used so DICENTIS can connect to other audio and control equipment
- ▶ Android™ in the DICENTIS Multimedia device enables the use of custom Android™ applications

#### Cost-effective

At its heart, the DICENTIS Conference System makes use of the unique IP-based OMNEO media networking architecture, developed by Bosch, and operates over fully standardized Ethernet networks. This ensures flexibility and cost-effective installation and maintenance. It also makes

DICENTIS ideal for re-using existing infrastructure. Conference devices can be connected with a looped daisy chain configuration using Bosch powering switches and Bosch system network cables. This provides a time-saving, flexible solution. Alternatively, CAT5e (or better) cables and standard Power over Ethernet (PoE) switches enable star configurations.

#### What is OMNEO?

OMNEO is an architectural approach to connecting devices that need to exchange information such as audio content or device control. Built upon multiple technologies, including IP and open public standards, OMNEO supports the technologies of today - such as Audinate's Dante™ - while adopting the standards of tomorrow. OMNEO offers a professional-grade media networking solution that provides interoperability, unique features for easier installation, better performance, and greater scalability than any other IP offering on the market.



DICENTIS is built on open standards enabling the integration of many different technologies, even third party solutions.



**Configured to your needs**

Each organization that uses a conference system has its own unique set of requirements, that's why the DICENTIS Conference System offers a wide choice of functions. Take a look at the table below to see what kind of system solution you could take advantage of.

Functions	DICENTIS Multimedia device	DICENTIS Discussion device with touchscreen	DICENTIS Discussion device with language selector	DICENTIS Discussion device with voting	DICENTIS Discussion device
Delegate configuration	X	X	X	X	X
Chairperson configuration	X	X	X	X	X
Discussion					
Language selection					
Voting					
NFC identification					
Dual use					
Automatic camera control					
Multimedia					

- All icons are explained on page 22.
- Automatic camera control is a system feature. The DICENTIS system supports ONVIF-compliant IP cameras, simplifying the integration of automatic camera control.
- The multimedia functions of the DICENTIS Multimedia device are document viewing, internet access, presentation viewing, live video and the use of third party Android™ apps.

# The system that always delivers

**Highly reliable and secure**

Inherent cable and power supply redundancy built into the DICENTIS Conference System, ensures no data is lost in the rare event of system failure. In addition, all audio and control data running through the system is securely encrypted by proven industry technologies, satisfying the most stringent and internationally recognized standards. This protects data against tampering and unauthorized access – extremely important in highly-secure or sensitive meeting situations.

**Latest functionality - always**

With regular software updates, the DICENTIS Conference System easily expands to incorporate newly-developed functionality - without the need for expensive hardware replacements. This includes the licensed system and seat software but also additional system features via third-party Android™ apps. Bosch offers a Software maintenance agreement (SMA) to help customers maintain their system. This service keeps the entire DICENTIS Conference System operating seamlessly across the platform and servers. It includes software and compatibility plugins for the system as well as a variety of Internet-based applications.

**Automatic camera control**

The DICENTIS system supports ONVIF-compliant IP cameras, simplifying the integration of automatic camera control. ONVIF is the market's leading, global standard for networked video, and it ensures that conference participants always see the person speaking on the hall display. In addition, DICENTIS also supports Sony and Panasonic cameras with CGI protocols.

**Environmentally friendly**

DICENTIS is designed to have minimal impact on the environment. For this reason, the system can be switched to stand-by mode. This patent-pending feature allows the chairperson to power off all the participant devices at once, significantly reducing power consumption and saving energy between meetings and during breaks.

The **new standard in conferencing** that does it all: discussion management, language selection, voting, multimedia functions, live video feed, dual use, internet access, document viewing, third party apps and more.



## Unique conference devices with industry-leading features

### Focus on the discussion at hand

- ▶ High directive microphone and intelligent Acoustic Feedback Suppression ensure crystal clear speech reproduction
- ▶ Loudspeaker and microphone can be active simultaneously to provide excellent speech intelligibility
- ▶ Optimal ergonomic design
- ▶ Advanced discussion functionalities, such as the “Possible to speak” indicator, to immediately engage in the discussion when the function is available

#### Clear, natural sound

All DICENTIS conference devices use intelligent Acoustic Feedback Suppression which is unique to Bosch, maximizing intelligibility when higher volume levels are required. This technology helps to avoid echoes and howling, resulting in clear speech intelligibility.

In addition, the microphone and loudspeaker are active at the same time, providing a natural sound. At all times, the participants and chairperson can listen to the meeting comfortably and focus on the discussion at hand.



#### Pluggable microphones

Three pluggable microphones can be used with any DICENTIS conference device: Long Stem, Short Stem and the High directive microphones. The High directive microphone employs high directive Bosch technology, allowing for crystal-clear reproduction of the spoken word, while the discrete design helps the speaker to convey their message in a natural way.

For acoustically challenging locations, or for when people want to speak standing upright from a rostrum, the uni-directional Microphone with long or short stem is the best solution.

#### Encouraging clarity

Design plays a key role in how people interact and it is central to creating an environment that encourages constructive dialogue. That's why Bosch has committed substantial resources to the research and development of the physical design of the DICENTIS conference devices. The result? Superior ergonomics, excellent ease of use, and a stylish yet unobtrusive appearance.

#### Keeping the meeting on track

The DICENTIS system is designed to optimize meeting structure and efficiency. Basic discussion settings can be defined for whichever DICENTIS conference device is being used. The meeting can be managed by an operator or chairperson, who can open or close a meeting, open voting rounds and decide which participant can speak and how many people can speak at the same time. The chairperson can also use the priority button to override all participant microphones whenever necessary.

Any conference device can be configured by software as either a participant or chairperson device, this minimizes the amount of necessary hardware and maximizes cost-efficiency.





# DICENTIS Multimedia device

## Inform. Impress. Inspire.

- ▶ User-friendly 7-inch high capacitive touchscreen to enhance the conference experience
- ▶ State-of-the-art award winning design
- ▶ Integrated Near Field Communication (NFC) Card Reader for quick participant identification and voting – participants can even use an existing registration card
- ▶ Two-way speaker system that offers outstanding intelligibility and sound quality
- ▶ Live video of the participant speaking can be followed on the device screens
- ▶ Internet access and document browsing to ensure that shared information is always up-to-date and that last minute corrections can be made on the spot

### Inspiring interaction

The DICENTIS Multimedia device's intuitive graphic user interface and easy to operate touchscreen enhances participant interaction and user comfort. Participants can follow the discussion in their own language, when simultaneous interpretation is provided. The touchscreen multimedia device integrates audio,

video, meeting data, internet access and a highly convenient electronic voting facility. All this enables participants to contribute more efficiently in meetings by having access to related information or the internet on their individual touchscreens, while the chairperson remains in full control.



You can follow the conference easily and speak in a natural way. All the information you need is at your fingertips.



### Attractive interface

DICENTIS Multimedia devices make use of the familiar Android™ operating system to provide an attractive and engaging interface. It also allows the use of custom-made or third-party apps to further increase meeting efficiency and for example the integration of room control.

### Award-winning design

The stylish internet-enabled DICENTIS Multimedia device is elegant, ergonomic and complements any interior. The multimedia device has already won several prestigious awards, including a Red Dot design award in 2014 and the German design award in 2015.

### Hear every word, every syllable

Extraordinary sound quality and intelligibility emits from the DICENTIS Multimedia device. Whether the source material is music or the spoken word. The special acoustic design with integrated two-way speaker systems reproduces the audio spectrum precisely. Bosch-engineered technologies further contribute to a more natural sound. Advanced equalization optimizes the acoustics throughout the room, while intelligent Acoustic Feedback Suppression technology from Bosch maximizes intelligibility when higher volume levels are required.

### See every expression

The DICENTIS system supports automatic camera control and makes use of Bosch HD Conference cameras for high-resolution images, enabling participants to see the face of the speaker on their own screen.

### Who's who

A name card holder with magnetic attachments on the rear of the device makes it easy for delegates to identify who is talking. A very practical option if the delegates did not get acquainted before the meeting.





# DICENTIS Discussion device with touchscreen

- ▶ 4.3 inch touchscreen shows the participant list, voting buttons and language selection, for increased meeting efficiency
- ▶ Integrated Near Field Communication (NFC) Card Reader for quick participant identification and voting – participants can even use an existing registration card
- ▶ Dual use minimizes the amount of necessary equipment - this saves costs and maximizes the space on the conference table

The DICENTIS Discussion device with touchscreen also has a built-in NFC Card Reader for quick participant identification. The delegate places an existing registration card in the vicinity of the device to identify to the system.

The pluggable Bosch High directive microphone provides ultra-clear speech intelligibility

Individual headphone volume control on the left and right side of the device



Touch screen with delegate names in native characters makes it clear who is talking and who is in the request list. The screen is also used for language selection and voting



The "Possible-to-speak" indication signals to the delegate that he can immediately speak when pressing the microphone button



The DICENTIS Discussion device with touchscreen offers an intuitive and clear conference experience, whether a device is being used by one or two participants.



### Speaking is only half of it

With its 4.3 inch capacitive touchscreen, the DICENTIS Discussion device with touchscreen guides participants and increases meeting efficiency. It achieves this by enabling the participants to see who is talking and who is in the queue. It can show a customer logo and enables the participant to follow the proceedings in their own language. It also provides access to the voting information.

### Two languages simultaneously

Two participants can use one DICENTIS Discussion device with touchscreen, which offers discussion management, identification, voting and language selection to both individuals. Importantly, each of the two delegates can listen to the proceedings in their own language via headphones. They sign on with an NFC card, and select their own language channel in the native characters.





## DICENTIS Discussion device with language selector

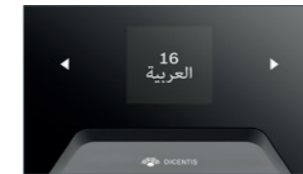
- ▶ Different languages are presented on the screen in native characters so that the delegate can easily find and select his language and focus on the meeting.
- ▶ Integrated Near Field Communication (NFC) Card Reader for quick participant identification – participants can even use an existing registration card
- ▶ Dual use minimizes the amount of necessary equipment - this saves costs and maximizes the space on the conference table

### Quick and simple language selection

When interpretation of the meeting is provided, the delegate simply plugs in the headset and selects the preferred language before the conference starts. The language selection is very straightforward since it is shown only when needed. It is also provided in native characters so that the delegates can quickly find their language and do not miss out on the beginning of the conference. They can focus on the discussion at hand right from the start.

### Two-in-one

The DICENTIS Discussion device with language selector allows for dual identification and dual discussion, with one shared language selection.



Good readability of native characters and symbols on the selector screen makes it easy for the delegate to select their language

The DICENTIS Discussion device with language selector also has a built-in NFC Card Reader for quick participant identification. The delegate places an existing registration card in the vicinity of the device to identify to the system

Bosch High directive microphone improves intelligibility and allows delegates to participate in a natural way



The microphone button(s) ensure intuitive (dual/ chairperson) participation

Volume control dial helps you hear every syllable when using your headphones



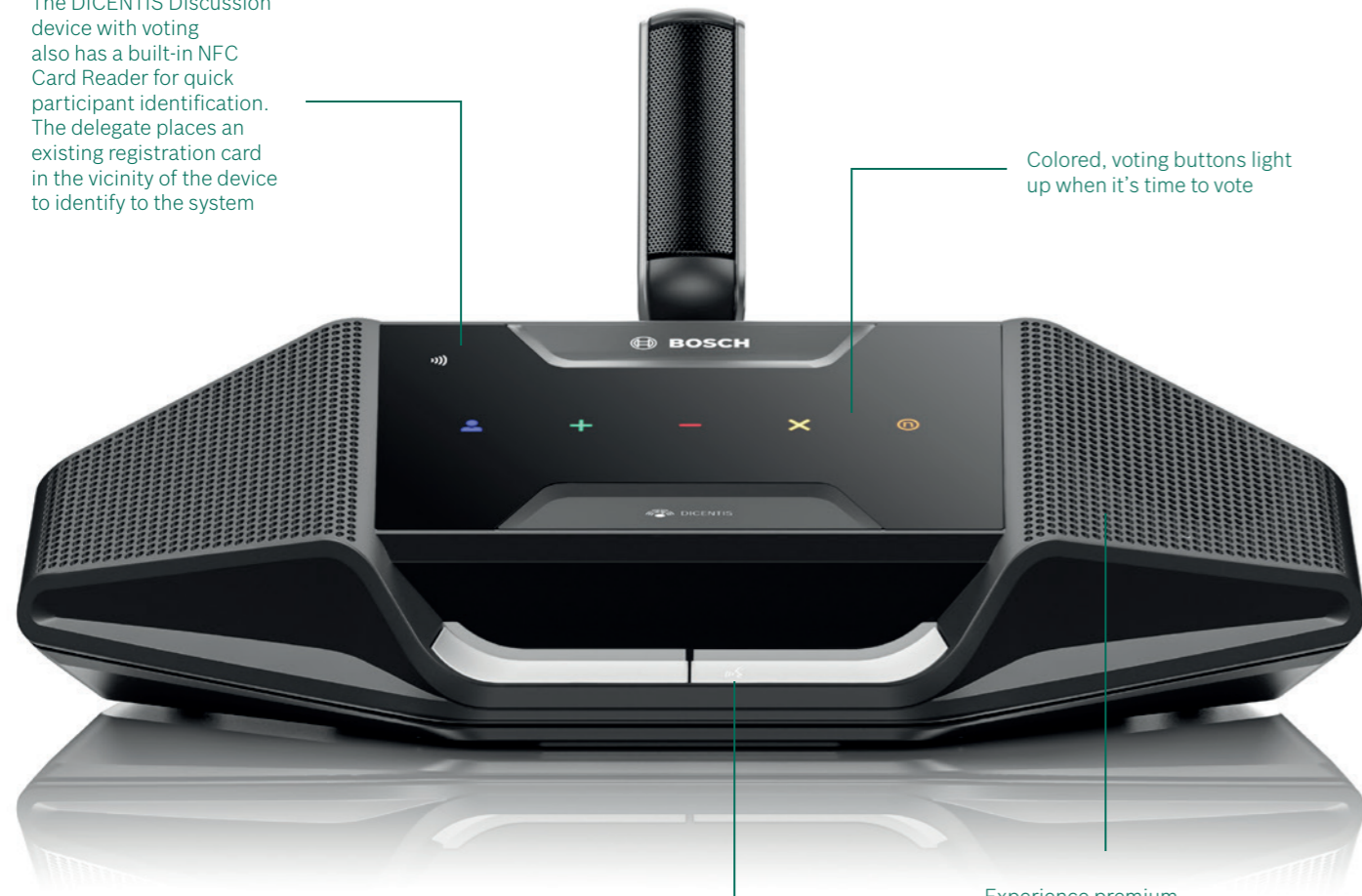


# DICENTIS Discussion device with voting

- ▶ Colored voting touch buttons light up on each device only when the functionality is required, enabling the participants to vote easily and quickly
- ▶ Integrated Near Field Communication (NFC) Card Reader for quick participant identification and voting – participants can even use an existing registration card
- ▶ Secret voting is supported, guaranteeing non-influenced voting results

The DICENTIS Discussion device with voting also has a built-in NFC Card Reader for quick participant identification. The delegate places an existing registration card in the vicinity of the device to identify to the system

Colored, voting buttons light up when it's time to vote



The "Possible-to-speak" indication signals to the delegate that he can immediately speak when pressing the microphone button

Experience premium acoustic design and audio processing with high quality Bosch speakers

### At the press of a button

Delegates vote by pressing one of the illuminated colored buttons on their device. Importantly, these buttons only appear when the voting is opened by the chairperson, this ensures that they do not distract the delegates during discussion.

### Secret voting

The DICENTIS Discussion device with voting enables "Secret Voting". In this setting, the voting LEDs will be rendered invisible the instant the delegate has cast their vote. This helps to ensure that participants cannot be influenced by the vote of a neighboring delegate.



The voting buttons only become visible on the screen when the chairperson opens the voting process, allowing participants to stay focused.



# DICENTIS Discussion device

- ▶ Facilitates basic conferencing with the "Possible to speak" indication to deliver the most straightforward use for all participants

The DICENTIS Discussion device enables participants to discuss, register a request-to-speak and listen to those speaking during the meeting. Like all DICENTIS conference devices this discussion device also provides the "Possible to speak" function. When this is indicated, the participant can start talking as soon as they press

the button. This device also supports dual use by means of a software license, to provide a cost efficient and flexible conference solution. In this way you can achieve a perfectly adequate setup with only half the devices.



With its intuitive ease of use, unobtrusive microphone and crystal clear speech, the DICENTIS Discussion device ensures that all meeting participants can focus on the issues at hand.





# DICENTIS Interpreter desk

## Speaking your language

- ▶ Intuitive operation based on logically divided language input and output sections, the use of personal presets and assignable buttons
- ▶ Tactile buttons and knobs enable operation without even looking at the interpreter desk, while the optional audible feedback guarantees easy operation for the visually impaired
- ▶ Accommodating future needs with up to 100 interpreted languages available
- ▶ Compliant to latest simultaneous interpreting standard ISO-20109
- ▶ Flexible configuration making it possible to increase the participant capacity by passive room coupling



Speaking the language of the interpreter, that's what it is all about. By observing and interviewing expert interpreters and technicians worldwide, the design of the desk is optimized for the real-life needs of interpreters. The result? An interpreter desk that complies with the latest as well as future market requirements and that provides the interpreter maximum freedom to focus on the job. The installation and configuration of the system is quick and easy. The interpreter desk and the interpreting system settings can be configured using the interpreter desk itself. The configuration can be further optimized using the PC application.

### Intuitive operation

The passive high-contrast screen of the DICENTIS Interpreter desk logically divides the sections for input and output languages in two vertical columns for quick understanding and intuitive operation. Personal presets can be recalled by the interpreter's NFC card. During the entire interpreting process, only relevant information is displayed and unused features can be hidden. A simplified DICENTIS Interpreter desk interface, showing only the used functions, can be configured for less experienced users.

Ideal for international institutes, conference centers and rental companies

### Even blind operation is possible

The ergonomic design—with tactile buttons, knobs and audible feedback provides better control and even makes operation possible without looking at the interpreter desk. This means that the interpreter can observe the speaker's non-verbal communication to provide the best possible interpretation.

### Safe and secure

The Internationally recognized encryption standards that DICENTIS uses for all audio and data are also applied for interpreting. For highly sensitive meetings, this encryption offers the best protection against eavesdropping, unauthorized access and data tampering.

The short stem microphone provides maximum speech intelligibility and is ideal for the interpreter desk

Vertically aligned incoming and outgoing languages for intuitive operation

Audible feedback to guarantee easy operation, especially for visually impaired interpreters

Tactile buttons and knobs for better control



High-contrast screen for quick comprehension

Three assignable buttons provide the interpreter with short-key functions for quick and easy access to supporting functions such as "speak slow", "replay", "video select", etc.

An integrated NFC card reader enables the interpreter to quickly access his/her personal settings







# System Software Components

## Easy installation and third party integration

The DICENTIS Conference System is a networked solution using state-of-the-art IP technology, this means multiple video feeds can be distributed to the interpreters without extra cabling for video. When interpreters are not close to the speaker, showing the facial expression of the speaker on one screen and at the same time displaying the meeting presentation on 2<sup>nd</sup> screen, can help them to provide a more accurate interpretation. A third party external screen can be connected to the HDMI video output on the DICENTIS Interpreter desk. The use of OMNEO IP Technology means that existing network infrastructure and third party solutions (such as Dante™ audio) can be used.

## Future-proof

Using IP also means that the system can be expanded to support up to 100 interpreted languages. The DICENTIS Interpreter desk also complies with ISO-20109, enforcing high quality and uniformity for interpreting equipment so interpreters know what to expect.

## Flexible configuration

Today, international convention centers need more flexibility. The number of participants differ for each hosted event. Sometimes, more capacity is needed and meeting room accommodations need to be increased. That's why the DICENTIS Conference system can easily be configured and reconfigured to increase the number of participants who can listen to the proceedings with passive-room coupling. Quite simply, the DICENTIS Conference system suits everyone's needs at all times.

## DICENTIS System server software license

- ▶ Licensed-based expandability makes the system extremely future-proof
- ▶ New system functionalities via software upgrades rather than replacing expensive hardware
- ▶ Automatic device discovery
- ▶ Controls up to 750 DICENTIS devices for participants
- ▶ Client server solution
- ▶ No user interaction needed to run the system
- ▶ Dante™ inputs and outputs for floor and languages

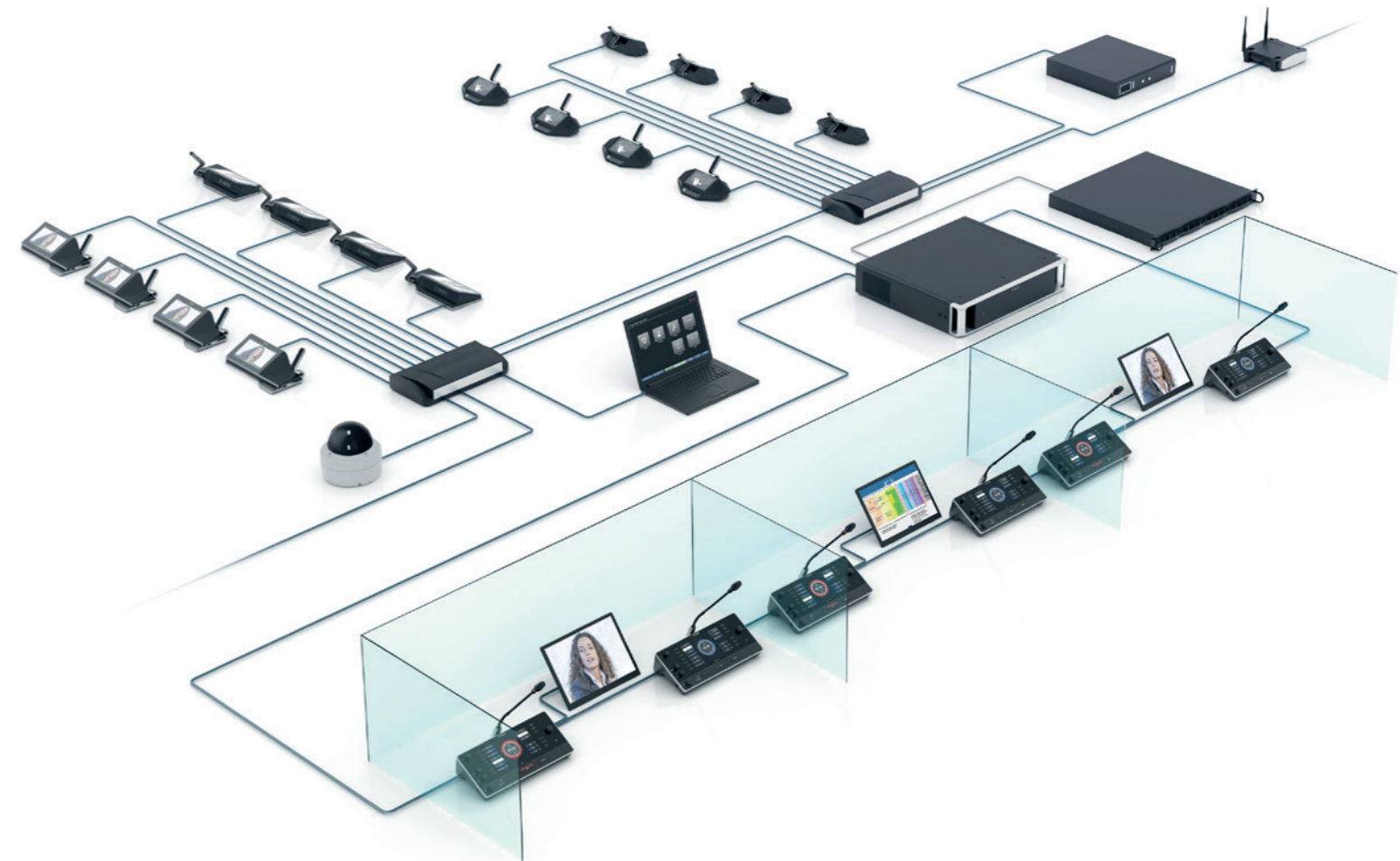
## DICENTIS Seat software license

- ▶ License for voting at 1 seat
- ▶ License for identification at 1 seat
- ▶ License for voting at 2 seats per device
- ▶ License for language selector at 1 seat



## DICENTIS Software maintenance agreement

- ▶ Ensures seamless, best-possible system performance
- ▶ Regular updates available
- ▶ Extended Software Maintenance Agreement for 1, 2 or 5 years





# System Hardware Components

## DICENTIS central equipment

### DICENTIS Audio processor and powering switch

- ▶ Provides power to all the devices of the DICENTIS Conference System
- ▶ Zero network configuration for ease of installation
- ▶ Fully compatible with Ethernet (IEEE802.3), OMNEO, and Dante™ for connection with third party equipment
- ▶ Supports loop through connection to reduce cost of installation
- ▶ Supports cable redundancy to optimize system availability
- ▶ Intelligent Acoustic Feedback Suppression and equalizer for optimal audio quality
- ▶ Stand-by mode for environment-friendliness
- ▶ Analogue audio inputs and outputs

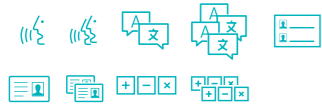


### DICENTIS Powering switch

- ▶ Provides power to all the devices of the DICENTIS Conference System
- ▶ Zero network configuration for ease of installation
- ▶ Fully compatible with Ethernet (IEEE802.3) and OMNEO
- ▶ Supports loop through connection to reduce cost of installation
- ▶ Supports cable redundancy to optimize system availability
- ▶ Stand-by mode for environment-friendliness

## DICENTIS Discussion device with touchscreen

- ▶ Identifies user - the device includes an NFC reader which supports different cards to register participants at the meeting
- ▶ Dual use for discussion, identification, language selection and voting – maximum efficiency with as little equipment as possible to reduce costs, ideal for venues with limited space
- ▶ Language selection so participants can listen to the proceedings in their own language
- ▶ On-screen meeting information like participant list indicating who is talking - for better meeting management
- ▶ Voting - quick and easy via on-screen colored buttons



## DICENTIS Interpreter desk

The DICENTIS Interpreter desk enables simultaneous interpreting in multi-language conferences, meetings or presentations. The DICENTIS Interpreter desk with video output gives the interpreter the possibility to see the current speaker or a presentation. The HDMI video output makes it easy to connect a third party external screen. The video images can be selected from the interpreter desk using one of the assignable buttons.



## DICENTIS Discussion device with language selector

- ▶ Identifies user - the device includes an NFC reader which supports different cards to register participants at the meeting
- ▶ Language selection – so the participant can listen in own language when simultaneous interpretation is available
- ▶ Dual discussion, dual identification – so two participants can simultaneously use the same device



## DICENTIS Discussion device with voting

- ▶ Identifies user - the device includes an NFC reader which supports different cards to register participants at the meeting
- ▶ Voting - quick and easy via colored voting touch buttons



## DICENTIS Discussion device

- ▶ Enables clear, productive discussion with advanced features such as "Request to speak" function and dual discussion functionality – so two participants can use the same device



## DICENTIS Microphones

A choice between 3 pluggable microphones:

### High directive microphone

- ▶ High directive Bosch technology allowing crystal-clear speech
- ▶ Discrete design helps the speaker to convey their message in a natural way
- ▶ Allows freedom of movement

### Microphone with long stem and short stem

- ▶ 480 and 310 mm stem models
- ▶ For acoustical challenging locations
- ▶ Perfect for the rostrum position where people speak when standing

## DICENTIS Multimedia device

- ▶ Identifies user - the device includes an NFC reader which supports different cards to register participants at the meeting
- ▶ Language selection – so participant can listen to the meeting in their own language when simultaneous interpretation is available
- ▶ Voting - quick and easy via on-screen colored buttons
- ▶ On-screen meeting information like participant list indicating who is talking - for better meeting management
- ▶ Live video feed – for real-time visual content
- ▶ Third party apps – for enhanced features
- ▶ Document viewing – for easy information sharing
- ▶ Internet access to consult information or people
- ▶ Presentation viewing
- ▶ Android™-API for custom built applications



## DICENTIS Transport Cases

- ▶ Robust, enabling safe transport and storage
- ▶ Equipment cut-outs in shaped foam interior
- ▶ Easy to pack, unpack and transport equipment
- ▶ Roller wheels on the larger case for convenient transportation and cushion grip handles, trigger release latches



### Icon legenda

- Discussion
- Dual discussion
- Identification
- Dual identification
- Voting
- Dual voting
- Language selection
- Dual language selection
- Participant list control
- Live video feed
- Third party apps
- Document viewing
- Internet access
- Presentation viewing



**Bosch Security Systems**

To learn more about the Bosch product offering, please visit [www.boschsecurity.com](http://www.boschsecurity.com) or send an e-mail to [emea.securitysystems@bosch.com](mailto:emea.securitysystems@bosch.com)

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