

CENTRAL UNIT ARCHITECT AND ENGINEER SPECIFICATIONS

The Central Unit shall provide fully digital audio transmission and control of the DCS 6000 Digital Conference System. The unit shall be scalable, facilitating small systems with only a few conference units, up to large systems with many conference units, channel selectors, interpretation and voting facilities. The unit shall operate up to 500 conference units and 150 interpreter units.

The unit shall connect to the DCS 6000 System by using the proprietary DCS-LAN protocol in a daisy-chain topology, using shielded CAT 5e cables. The DCS-LAN protocol shall transport power, audio and control data across a chain of discussion units, including a codec algorithm to prevent unauthorized listening to the audio signal.

The Central Unit shall transmit a low-latency audio signal of the floor channel and up to 16 interpretation channels. Up to eight conference microphones shall be open at the same time on the floor channel. The audio from the floor shall be routed from Group A and/or from the Audio In. There shall be four groups available for routing the discussion unit audio mixes to the analog outputs.

The Central Unit shall feature four analog audio outputs and two analog audio inputs. The four analog audio outputs shall distribute audio from the four groups, the floor channel or the interpreter channels. This shall be used for recording purposes, connection to external PA systems, or connection to a language distribution system (e.g., DIS digital wireless infrared system). The two analog inputs shall be available for an external audio input. The second input shall supply contact closures for an emergency evacuation message (EEM). The EEM shall use the contact closure switch on the second input to override the discussion to broadcast the emergency signal.

The OLED display on the front of the unit shall enable the user to setup basic system configurations for the maximum number of speakers/requests, microphone operation mode, and network address, etc.

The Central Unit shall provide support for three microphone operation modes: Automatic, FIFO and Manual. An additional mode, VOX (voice activation), shall be available with a feature license. The modes Automatic, Manual and VOX shall be available with Reply mode as well.

Additional features shall be available for the central unit by purchasing a license key. The upgrade shall be installable using the built in browser. The following additional features shall be available:

- Control of up to 500 conference units
- Voting
- VOX Voice Activation operation mode
- 16 interpretations channels

The Central Unit shall provide TCP/IP Ethernet connection for external communication control with a simple-to-use protocol. The unit shall provide a webserver for system control through a multi-language web browser from a computer connected to the network. The web interface shall allow full configuration management, microphone control, audio routing, and system settings. The browser shall provide a table for assigning seat numbers and delegate names to units.

The unit shall operate with the SW 6000 Conference Management Software to provide the following advanced functionality: additional voting options, conference facilities including agenda handling,

delegate details/tables and reports, mimic operation, message handling, chip card registration, multi-language user interface.

The Central Unit shall measure 44.4 mm in height, 426 mm in width and 186 mm in depth. The unit shall weigh 2800g, with a storage temperature of -20° to 60° C, 10-80% humidity, and an optimal operating temperature of 5° to 40° C, 35-80% humidity.

The Central Unit shall have 125W/48V supply voltage, and a 65 Hz-16 kHz frequency response. The audio quality shall be 24-bit audio, 32 kHz sampling frequency, and > 85 dBA signal-to-noise ratio.

The central unit shall be a DIS CU 6105 Central Unit.