

## **CENTRAL UNIT (CU 6110) 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 3800 conference units and 150 interpreter units.

The conference units and interpreter units shall connect to the central unit in a daisy chain topology (connected in serial) or a star topology with junction boxes. The chain of conference units shall use shielded CAT 5e (or higher) F/UTP, or U/FTP cables. The audio and data transport shall be a proprietary codec algorithm that prevents unauthorized listening to the audio signal.

The Central Unit shall transmit a low-latency audio signal of the floor channel and up to 31 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. The audio from the units can be divided into 8 groups using a built-in group matrix.

The Central Unit shall feature eight analog audio outputs and two analog audio inputs. The eight analog audio outputs shall distribute audio from the eight 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 LCD 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.

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 3800 conference units
- Voting
- VOX Voice Activation operation mode
- 31 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 that allows advanced system control through a 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 name to units

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

delegate details 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 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 model CU 6110 Central Unit.