

## HCS-5100MC/16BD 16 CHs Digital Infrared Transmitter



### Features

- Compliant with ISO 22259
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 16 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 1~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - ◆ Mono, standard quality, maximum 16 channels
  - ◆ Mono, perfect quality, maximum 8 channels
  - ◆ Stereo, standard quality, maximum 8 channels
  - ◆ Stereo, perfect quality, maximum 4 channel
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- With web control function, transmitter can be controlled through web page
- Digital Infrared Radiator can be turned off remotely via RS-232 port
- With the function of synchronous shutdown of the radiator and the transmitter
- Universal mains power facility allows worldwide use

The transmitter is the heart of the HCS-5100Plus system. HCS-5100MC/16BD accepts and modulates up to 16 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit through HCS-8300MO 8 Channels Audio Output Device, or be used as a stand-alone system for distributing external audio signals. HCS-5100MC/16BD is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

### Controls and Indicators

- 2.8" LCD displays status and menu of the system configuration, supporting multi language menu
- One operation knob` for configuration
- Standby switch with indicator
- Mini IR radiators

### Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 16 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- USB\_H interfaces to upgrade system and to save system parameters.
- Ethernet and RS232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Dante interface for connecting to the Dante network to transmit input and output audio signal
- Power supply socket

### Technical Specifications

#### System Specifications

|                           |                                                                                          |
|---------------------------|------------------------------------------------------------------------------------------|
| Modulation.....           | DQPSK, according to IEC 61603-7                                                          |
| Modulation frequency..... | 1 to 8 MHz                                                                               |
| Carriers.....             | 0 to 5; 2 to 6 MHz, according to IEC 61603-7                                             |
| Frequency response.....   | 20 Hz to 10 kHz (-3dB) at standard quality;<br>20 Hz to 20 kHz (-3dB) at perfect quality |
| THD at 1 kHz.....         | ≤0.05%                                                                                   |
| Isolation.....            | ≥85 dB                                                                                   |
| Dynamic range.....        | ≥90 dB                                                                                   |
| Weighted SNR.....         | ≥85 dBA                                                                                  |

**Electrical**

Unbalanced audio inputs.....-12 dBV to +12 dBV nominal  
Balanced audio inputs.....-6 dBV to +18 dBV nominal  
Emergency switch connector...2-PIN 3.81 mm Phoenix connector,  
alarm signal control input  
Headphone output.....32 Ohm to 2 kOhm  
HF input/output.....75 Ohm  
Power supply.....AC 100 V - 240 V, 50 Hz / 60 Hz  
Power consumption.....Maximum 25 W

**Mechanical**

Mounting.....Brackets for 19" rack mounting or fixing to a table top;  
detachable feet for free-standing use on a table top  
Dimensions h x w x d (mm).....88 × 480 × 418  
Weight.....6.6 kg  
Color.....Black (PANTONE 419 C)

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**Ordering Information**

HCS-5100MC/16BD.....16 CHs Digital Infrared  
Transmitter (dante interface)