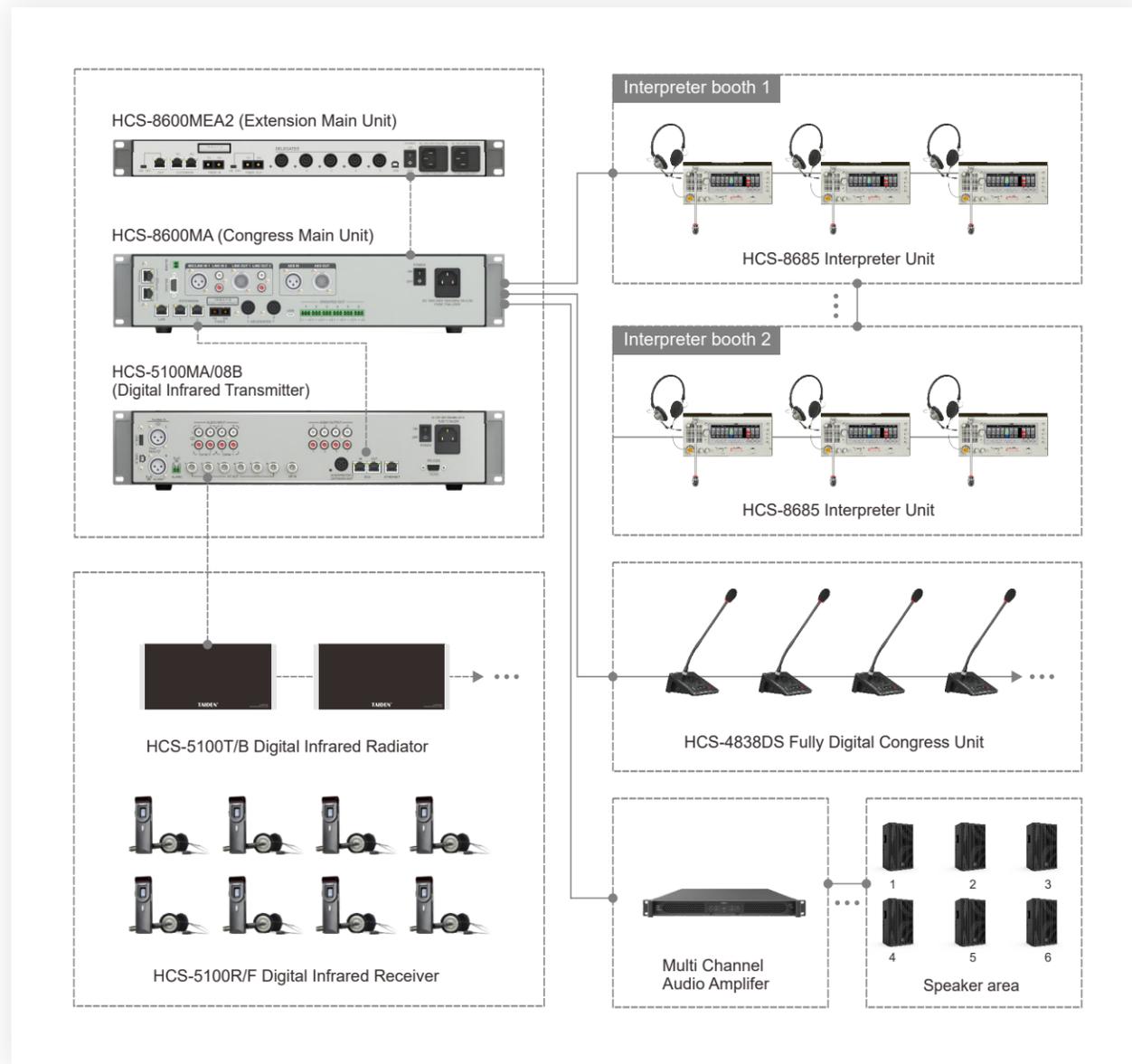


# TAIDEN®

## Digital Infrared Language Distribution System




 ISO9001: 2015  
 Certified by ANAB  
 Certificate No.: FM 85884


 CE certified  
 (including EMC and Safety)


 FCC certified

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# Digital Infrared Language Distribution System

In 2008, TAIDEN successfully developed the digital infrared processing chip with independent intellectual property rights and launched the world's first HCS-5300 Series Digital Infrared Conference System and HCS-5100 Series Digital Infrared Language Distribution System in line with the international standard for digital infrared.

The system has superb sound quality and innovative features such as "language name display", "270° ultra-wide reception angle" and "transmitter combination mode", establishing the technical leadership of TAIDEN in the field of international conference systems.

Now, with the successful development of the new generation digital infrared processing chip, TAIDEN launches the HCS-5100 Digital Infrared Language Distribution System. This system supports at most 40 distributing channels which is the most advanced infrared language distribution system we've ever built.



## System Products

HCS-5100M Series Digital Infrared Transmitter

HCS-5100R/F Series Digital Infrared Receiver

HCS-4100 Series Fully Digital Congress Unit

HCS-4800 Series Congress Unit

HCS-5100T Series Digital Infrared Radiator

HCS-8685 Interpreter Unit

HCS-4385U/50 Interpreter Unit

\* HCS-4100 Series Fully Digital Congress Unit will not be introduced in detail here. For details, please refer to the brochure "Fully Digital Congress System".

## System Advantages



### Fully Certificated Widely Compatible

- Compliant to IEC 61603-7 and ISO 22259
- Compatible with any other infrared simultaneous interpretation systems compliant to IEC 61603-7



### Higher Security

- Infrared transmission signals cannot penetrate through walls and ceilings guarantees strong confidentiality of the conference
- Transmitting in 1~8 MHz frequency band, which is not easy to be interfered by HF-driven lighting and can work without errors in bright sunlight



### Superb Sound Quality

- Seamlessly connects with HCS-4100/50 Series, HCS-4800 Series, HCS-8300 Series, HCS-8600 Series and the simultaneous interpreter units
- From the speaking units, interpreter units to language distribution system, every link has high-quality digital audio signals with a frequency response of 20 Hz to 20 kHz and SNR ≥85 dBA



### Original Language Name Display

- Digital Infrared Receiver has a LCD screen displaying the channel number and language name that delegates chose



### 270° Ultra-wide Reception Angle

- 270° ultra-wide reception angle with optimal sound everywhere



### Various Audio Channels

- Push-button channel selector which can receive up to 40 audio channels
- System automatically synchronizes the actual number of channels used while unused channel will be excluded



## Digital Infrared Transmitter

HCS-5100M/B Series



HCS-5100M/B Series Digital Infrared Transmitter adopts DQPSK digital modulation/demodulation technology to connect interpreter units to realize simultaneous interpretation, etc. Suitable for small, medium and large international conference halls or outdoor venues. Due to the high transmission frequency (1~8 MHz), it fully satisfies the user's demand for secure, confidential and interference-free meetings.

### Rotary Step Control + 2.8" LCD Screen

- Rotary step control can quickly select and set the LCD menu, and the LCD screen displays status and configuration information

### Independent Adjustability

- Built-in infrared emitters for audio monitoring, adjustable sensitivity for each audio input to enable fine tuning of audio levels

### Customize Languages

- A language name can be assigned to each channel for easy identification, and the simultaneous interpretation language can be customized

### Easy Management

- The main unit can be accessed through a computer browser, or be connected via Ethernet and RS-232 port
- RS-232 port also for connection to network central control system
- USB interfaces to upgrade system and save system parameters
- Radiators can be connected via 6 BNC output connectors and shutdown by the main unit remotely
- Bypass mode for distribution of signals to another transmitter for multiple rooms

## Function Comparison

Model	Channel	Fiber Interface	DCS Interface	6-PIN Connector	Dante
HCS-5100MA/FS/08B	8 (1+7)	•	•	•	
HCS-5100MA/FS/16B	16 (1+15)	•	•	•	
HCS-5100MA/04B	4 (1+3)		•	•	
HCS-5100MA/08B	8 (1+7)		•	•	
HCS-5100MC/08BD	8 (1+7)				•
HCS-5100MC/16BD	16 (1+15)				•
HCS-5100MC/40BD	40 (1+39)				•
HCS-5100MC/40B	40 (1+39)				

## Specifications

Standards and Specifications	
Standards	ISO 22259
Compatibility	Compatible with any other infrared simultaneous interpretation system compliant to IEC 61603-7
Audio Characteristics	
Frequency Response	20 Hz ~ 10 kHz (-3 dB) at standard quality 20 Hz ~ 20 kHz (-3 dB) at perfect quality
THD (1kHz)	<0.05%
Isolation (1kHz)	>85 dB
Dynamic Range	>90 dB
SNR	≥85 dBA
Physical Characteristics	
Input Voltage	AC 100 V - 240 V, 50 Hz/60 Hz
Max. Power Consumption	25 W
Dimensions (h×w×d)	88×480×418 mm
Weight	7 kg (HCS-5100MA/FS/B Series) 6.8 kg (HCS-5100MA/B Series) 6.6 kg (HCS-5100MC/B Series)

## Digital Infrared Receiver

HCS-5100R/F Series



HCS-5100R/F Series Digital Infrared Receiver adopts the digital infrared processing chip with independent intellectual property rights and DQPSK digital modulation/demodulation technology. Cooperated with HCS-5300/80 Digital Infrared Wireless Conference System to realize 1+7 channel infrared wireless simultaneous interpretation function. Using single earphone (EP-820AS, EP-829, EP-829SW) or headphone (HCS-5100PA, EP-960BH) for easy and comfortable use.

### Easy Management

- No limit to the receiver number within the infrared power radiation range
- When the signal is too low, the audio signal is automatically muted

### Anti-interference

- Allows for simultaneous use in adjacent rooms
- Immune to radio and HF-driven lighting interference and works perfectly in direct sunlight

### Push Button Channel Selection

- Receives 4, 8, 16, 32 or 40 audio channels

### Flexible Operation

- Can be hung over the neck via a nice strap or fit into the shirt pocket
- Freedom of movement within the range of infrared power radiator

### LCD Display

- LCD display with channel number, language name, battery and signal status indication

### Ultra-wide Reception Angle

- 270° ultra-wide reception angle with perfect sound everywhere

## Function Comparison

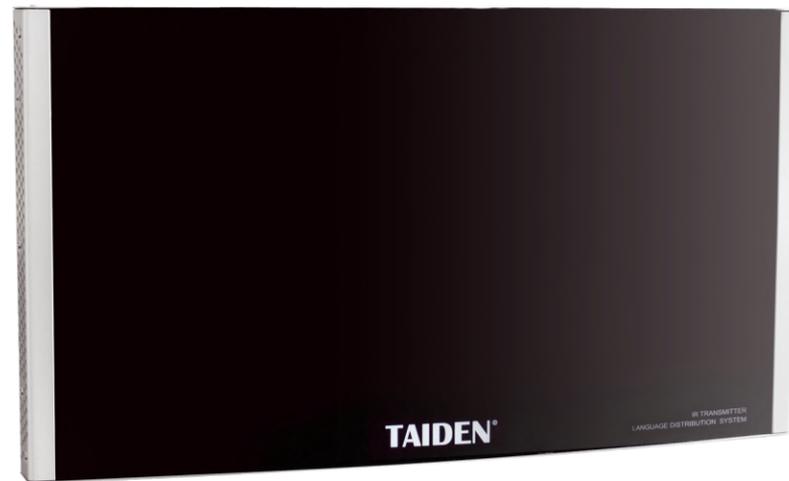
Model	Channel	LCD	Rechargeable Battery	AA Alkaline Battery
HCS-5100R/04F	4 (1+3)	•	•	•
HCS-5100R/08F	8 (1+7)	•	•	•
HCS-5100R/16F	16 (1+15)	•	•	•
HCS-5100R/32F	32 (1+31)	•	•	•
HCS-5100R/40F	40 (1+39)	•	•	•
HCS-5100RA/04F	4 (1+3)	•		•
HCS-5100RA/08F	8 (1+7)	•		•

## Specifications

Standards and Specifications			
Compatibility	Compatible with any other infrared simultaneous interpretation systems compliant to IEC 61603-7		
Transmission Characteristics			
IR Radiation	Per carrier 4mW/m <sup>2</sup>	Headset Output	450 mVrms
Receiving Angle	270°	SNR	>85 dBA
Headset			
Output Frequency Response	20 Hz ~ 20 kHz	Output Impedance	32 Ω ~ 2 kΩ
Physical Characteristics			
Supply Voltage	2.5 V – 4.2 V, nominal 3.0 V		
Power Consumption	Nominal (3.0 V power supply) 38 mA (32 Ω headset) headset disconnected 0 mA		
Battery Duration	55 h (2×AA alkaline cells) 42 h (Li-ion rechargeable battery pack)		
Dimensions (h×w×d)	155×46×24 mm		
Weight	70 g (battery not included) 115 g (battery included)		
Color	Black (PANTONE 419 C)		

# Digital Infrared Radiator

HCS-5100T Series



HCS-5100T Series radiator unit contains 25W and 35W transmission power models, the maximum radiation range can reach 50 meters and 97 meters respectively which are available to suit venues of various sizes. It supports multiple installation methods, 13 adjustable launch angles, automatic gain control. It is an ideal choice for large and medium-sized conference venues.

### Multiple Installation

- Support fixed installation, triangle bracket installation, etc., 13 adjustable launch angles

### Overheat Protection

- LED indication at high temperature, automatically switch to half power
- Manual half-power switch is convenient to small conference venues

### Three Status Indications

- Standby/Working/Failure indications and synchronized ON/OFF with transmitter

### Cable Transmission Delay Compensation

- 20 Hz to 10 kHz (-3 dB) at standard quality
- 20 Hz to 20 kHz (-3 dB) at perfect quality

## Function Comparison

Model	Transmission Power	Power Consumption	Radiation Length	Input Output	Half-transmitting Angle
HCS-5100T/25B	25 W	62 W	50 m	75 Ω	±22°
HCS-5100T/35B	35 W	120 W	97 m	75 Ω	±22°

## Specifications

Standards and Specifications	
Compatibility	Compatible with any other infrared simultaneous interpretation systems compliant to IEC 61603-7
Physical Characteristics	
Input Voltage	AC 100 V - 240 V 50/60 Hz
Power Consumption (stand by)	3 W
Max. Power Consumption	62W (HCS-5100T/25B) 120W (HCS-5100T/35B)
Dimensions (h×w×d)	212×448×110 mm (HCS-5100T/25B) 272×498×110 mm (HCS-5100T/35B)
Weight	3.1 kg (HCS-5100T/25B) 4.2 kg (HCS-5100T/35B)
Color	Dark red (PANTONE 476 C)



## Fully Digital Simultaneous Interpreter Unit

HCS-8685

HCS-4385U/50



The design of HCS-4385U/50 and HCS-8685 have extensively collected the requirements of interpreters and administrators from EU, UN, IMF, the World Bank, European Commission and other institutions. Tailored for 64 channels simultaneous interpretation. The structure is more ergonomic, with new functions such as password management, richer information display, and seamless connection with video devices.

### Outstanding Sound quality

- Able to display Channel ID of input/output channel, language, input quality indication and short messages
- Gain and EQ of the activated microphone adjustable either by the main unit or the application software
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Built-in loudspeaker with volume control and when all microphones are off, the loudspeaker will play floor language or interpretation channel

### 64 Interpretation Channels

- Supporting 48 kHz audio sampling rate, all 64 channels with a frequency response of 30 Hz to 20 kHz
- Support direct and relay interpretation

### Convenient Operation

- The host or application software can preset the name of each channel language
- Turn on the microphone in the same interpreter booth and turn off the microphone in the previous interpreter booth automatically

## Function Comparison

	HCS-4385U/50	HCS-8685
LCD HD display	256×64 LCD	6.8" TFT LCD
Language channels	5 channels input 3 channels output	7 channels input 3 channels output
Mute function, speaking speed reminder cell function, memory, playback	•	•
Video switching		•
Braille		•
Receive messages via Bluetooth		•
Password setting		•
Hearing protection		•

## Specifications

Standards and Specifications		
Standards	ISO 20109, ISO 2603 and ISO 4043	
Audio	HCS-4385U/50	HCS-8685
Output Frequency Response	30 ~ 20000 Hz	
Max. Power Consumption	2.8W	5 W
Microphone		
Model	Uni-directional electret condenser microphone	
Sensitivity	-46 dBV/Pa	
Frequency Response	50 ~ 20000 Hz	
Headset		
Load Impedance	>16 Ω	
Headset Output Interface	Ø 3.5 mm/Ø 6.4 mm Stereo Plug	3×Ø 3.5 mm TRRS Stereo Plug
Physical Characteristics		
Stem Microphone	330 mm (default), 410 mm, 470 mm	
Dimensions (h×w×d)	78×290×126 mm (w/o stem microphone)	83×320×148 mm (w/o stem microphone)
Weight	0.9 kg (incl. stem microphone)	1.1 kg (incl. stem microphone)

## Accessories

HCS-851A/02 Mobile Interpreter Booth



HCS-851A/03 Mobile Interpreter Booth



HCS-851K Interpreter Booth Shipping Case



HCS-851KT Interpreter Booth Shipping Case



HCS-851A Series Mobile Interpreter Booth is made of odorless, antistatic, fire-retardant materials, with sound-absorbing materials on the inner surface. Its aluminum alloy skeleton is easy to disassemble. It can accommodate two or three interpreters sitting comfortably side by side.

### Ultra-low Noise

- Outward facing hinged door operates silently
- Using low-noise exhaust fan with ventilation system that renews the air at least 8 times an hour

### Clear Sight

- The booth has front and side windows, which are 0.79 m above the ground

## Function Comparison

Model	Accommodated Number	Shipping Case
HCS-851A/02	2	HCS-851K Interpreter Booth Shipping Case
HCS-851A/03	3	HCS-851K & HCS-851KT Interpreter Booth Shipping Case

## Specifications

Standards and Specifications		
Standards	ISO 4043	
Model	HCS-851A/02	HCS-851A/03
Weighted Transmission Loss	>24 dB (1 kHz)	
Reverberation Time	Between 0.3 and 0.5 s (octave bands from 125 Hz to 4000 Hz, booth unoccupied)	
Observation Port-hole	0.20×0.20 m	
Front and Side Windows (height)	0.87 m	
Internal Dimensions (h×w×d)	200×160×160 cm	200×240×160 cm
External Dimensions (h×w×d)	204×172×172 cm	204×252×172 cm
Shipping Case Dimensions (h×w×d)	110×209×75 cm (HCS-851K)	110×209×75 cm (HCS-851K) 91×215×40 cm (HCS-851KT)
Shipping Case Weight (including the booth)	260 kg	350 kg

## Accessories



### HCS-4853T Cable Splitter

- Relay facility, amplification of the communication signals
- "1 in / 3 out" structure for connection, for the connection of HCS-5100M/B series main unit and HCS-8685 Simultaneous Interpretation Unit
- 2m-cable with a 6P-DIN connector at the input end
- Three 8PIN output interfaces, can drive 60-meter long extension cable
- Dimensions (h×w×d): 35×149×90 mm

## Accessories



### EP-830 Single Earphone

- Used with the receiver or a congress unit
- Hi-Fi sound quality
- The earmuff can be removed from the headphone core and washable
- 32  $\Omega$ ,  $\varnothing$  3.5 mm stereo plug (Tip and Sleeve, Ring: NC)
- Frequency response: 20 Hz to 20 kHz
- Sensitivity:  $\geq 108$  dBA/1 mW
- Weight: 25 g



### EP-820AS Single Earphone

- Used with the receiver or a congress unit
- Hi-Fi sound quality
- $\varnothing$  3.5 mm stereo plug (TRS)
- 32  $\Omega$  (Tip and Sleeve, Ring: NC)
- Frequency response: 50 Hz to 20 kHz
- Sensitivity:  $\geq 102$  dBA/1 mW
- Weight: 20 g



### EP-960AN Interpreter Headset

- Used with the interpreter unit
- Hi-Fi sound quality
- 2 $\times$ 150  $\Omega$ ,  $\varnothing$  3.5 mm TRRS plug
- Frequency response: 20 Hz to 20 kHz
- Sensitivity:  $\geq 108$  dBA/1 mW
- Frequency of microphone: 50 Hz to 20 kHz
- Sensitivity of microphone: -48 dBV/Pa
- Impedance of microphone: <680  $\Omega$
- Weight: 95 g



### EP-960BH Interpreter Headphone

- Used with the interpreter unit
- Hi-Fi sound quality
- 2 $\times$ 150  $\Omega$ ,  $\varnothing$  3.5 mm stereo plug
- Frequency response: 20 Hz to 20 kHz
- Sensitivity:  $\geq 108$  dBA/1 mW
- Weight: 90 g



### HCS-5100PA Headphones (Stereo)

- Used with the receiver or a congress unit
- Hi-Fi sound quality
- 2 $\times$ 32  $\Omega$ ,  $\varnothing$  3.5 mm stereo plug (TRS)
- Frequency response: 20 Hz to 20 kHz
- Sensitivity:  $\geq 108$  dBA/1 mW
- Weight: 70 g



### HCS-5100BAT-Li Li-ion Rechargeable Battery Pack

- Rechargeable battery pack
- 1500 mAh, 3.7 V lithium battery
- Dimensions (h $\times$ w $\times$ d) : 15 $\times$ 48 $\times$ 29 mm
- Weight: 45 g



### HCS-5100CHG/60A IR Receiver Charging Case

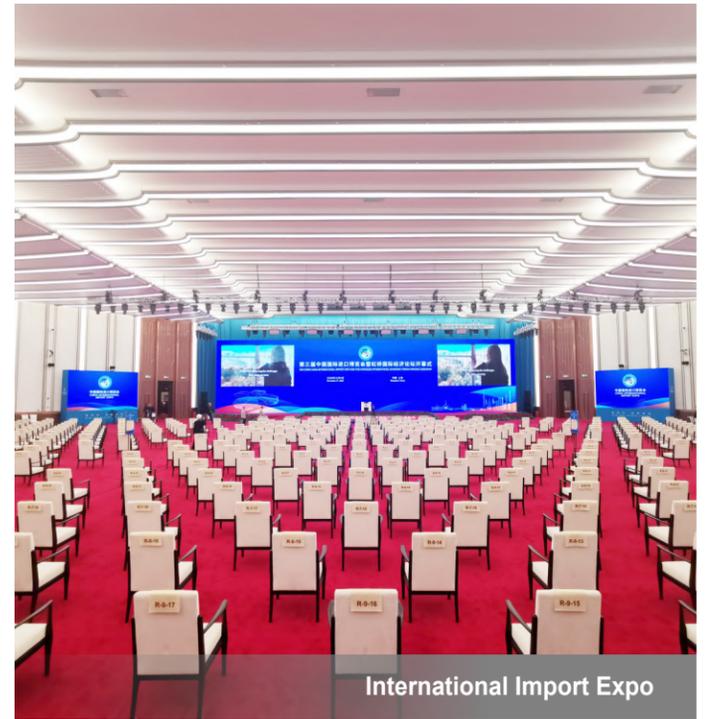
- Used for charging IR receivers (HCS-5100R series)
- Charges 60 pcs of IR receivers per charging
- Input voltage: AC 100 V-240 V, 50 Hz/60 Hz
- Power consumption:
  - 280 W (when 60 IR receivers are charging)
  - 7 W (stand by, with no IR receiver charging)
- Dimensions (h $\times$ w $\times$ d): 265 $\times$ 525 $\times$ 400 mm
- Weight: 11.3 kg (w/o infrared receiver)



### HCS-5100KS IR Receiver Storage Case

- Used for storing and transporting IR receivers
- Every case can store up to 100 IR receivers
- Dimensions (h $\times$ w $\times$ d): 205 $\times$ 669 $\times$ 307 mm
- Net weight: 6 kg (w/o IR receiver)
- Gross weight: 14 kg (w/100 pcs IR receivers, w/o battery)

# Selected Cases



UN Global Sustainable Transport Conference

UNCCD Conference of the Parties (COP 13)

International Import Expo

UN Biodiversity Conference (COP 15)

Annual Meetings of the IMF and the World Bank

ITU Plenipotentiary Conference

G20 Summit