



## ***BROCHURE***



**PAGING • INTERCOM • MUSIC STREAMING • AUDIO ROUTING  
MESSAGING • LOGIC CONTROL • BELL SCHEDULING • MONITORING**

The TERRACOM is a SIP-based audio solution distribution over an IP network, which requires NO centralised equipment or software. The TERRACOM supports PoE, or can be powered via an external 24 VDC supply if PoE is not available. The network infrastructure of TERRACOM enables it to be deployed and managed over an existing network. This provides a fast, easy and cost effective integration solution for an existing or new build site. Once installed the system offers a high level of flexibility as each TERRACOM end point device is individually addressed and can be configured locally or remotely from anywhere in the world that has network access.

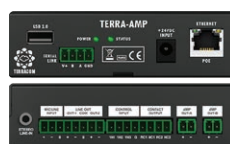
All the TERRACOM devices are configured and managed via a web based browser interface. The TERRACOM range of devices offer a wide range of functionality including, priority, backup & event management, event scheduling, level control, paging, full duplex audio communication, intercom, music streaming, audio routing, logic control, monitoring and much more.

By using the TerraManager GUI-based control software, call-paging, full duplex intercom, paging groups, zones selection, audio routing, recording, event scheduler, device I/O monitoring and other control functions and device management can be easily programmed and operated. For more complex solutions that may require In-Store music streaming and system pre-management, this can be configured & monitored using our TerraServer integrated management software.



**TERRA-EX**  
**Cost-Effective**  
**IP Audio Decoder**

- 2 balanced line outputs (1 stereo or 2 mono), 3 contact inputs, 1 contact output, RS232/RS485 for 3rd party control
- Optional USB 2.0 interface for music/message storage, playback and recording (TERRA-EXU, TERRA-EXU2 and TERRA-EXU4)
- Internal 80 MB storage for message recording and music playback
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder



**TERRA-AMP**  
**Amplified IP Terminal**  
**(15W x 2)**

- 15W x 2 (8 ohm) amp outputs, 1 mic/line input, 2 balanced line outputs (1 stereo or 2 mono), 3 contact inputs, 2 contact outputs, RS232/RS485 for 3rd party control
- USB 2.0 interface for music/message storage, playback and recording
- Internal 80 MB storage for message recording and music playback
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder



**TERRA-IEX**  
**Full Duplex IP**  
**Audio Encoder/Decoder**

- 2 mic/line inputs, 2 balanced line outputs (1 stereo or 2 mono), 3 contact inputs, 1 contact output, RS232/RS485 for 3rd party control
- Optional USB 2.0 interface for music/message storage, playback and recording (TERRA-IEXU and TERRA-IEXU4)
- Internal 80 MB storage for message recording and music playback
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder



**TERRA-FXO**  
**Full Duplex IP Terminal**  
**to Telecom Gateway**

- 2 sets of telephone lines, RS485/RS232 for 3rd party control
- Full duplex with Acoustic Echo Cancellation and Noise Cancellation
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec
- Support to receive DTMF code from SIP phone



**TERRA-FDX**  
**Full Duplex IP Terminal**  
**for Intercom**

- 2 mic/line inputs, 2 balanced line outputs (1 stereo or 2 mono), 3 contact inputs, 2 contact outputs, RS232/RS485 for 3rd party control
- USB 2.0 interface for music/message storage, playback and recording
- Full duplex with Acoustic Echo Cancellation
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder



**TERRA-IO**  
**Contact I/O Terminal**  
**over IP**

- Available in two options: TERRA-4IO (4 contact in and 4 contact out) and TERRA-8IO (8 contact in and 8 contact out)
- RS232 or RS485 for 3rd party control
- SNMP (Simple Network Management Protocol) for device management on IP networks



### **TERRA-EXA**

**Cost-Effective Amplified  
IP Audio Decoder (20W x 2)**

- 20W x 2 (8 ohm) amp outputs, 3 contact inputs, 1 contact output
- Internal 80 MB storage for message recording and music playback
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder
- Power supply via 24VDC power input (max. 2A), PoE not available



### **TERRA-RD**

**IP Radio and  
Paging Control Station**

- 2.2" colour LCD panel with configurable setting, built-in speaker
- Buttons for radio channel selection and volume adjustment
- Evac, fault, vote paging, power LED
- RTP / HTTP / MMS / shoutcast / Icecast



### **TERRA-DS1**

**Flush-Mount SIP/IP Door Station**

- Full duplex intercom with Noise Reduction
- 2 contact outputs for door open/close and 4 contact inputs
- Built-in condenser mic and loudspeaker
- Push-to-talk button, support SIP-based call
- Stainless steel front panel
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder



### **PPM-ITS**

**Programmable IP Paging & Intercom Console**

- 5" TFT LCD colour touch panel
- Full duplex intercom with AEC and NR, zone selection, paging and control
- Internal 80 MB storage for message recording and music playback
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder



### **TERRA-K**

**IP-Based Intercom Microphone**

- Full duplex intercom
- Paging to pre-defined zones
- Pre-recorded announcement and dynamic zone paging via TerraManager
- Support G.711, G.722, G.726, G.727, G.729, WAV, MP3 audio codec and AAC+ decoder

## **ACCESSORIES**



### **RAC 5 / RAC 8**

#### **5/8 Steps Level and Source Selector**

- Adjust audio level or switch audio channel remotely
- The 5/8 steps knobs can be programmed via web browser
- Available for US and EU type, and is powered by 24VDC



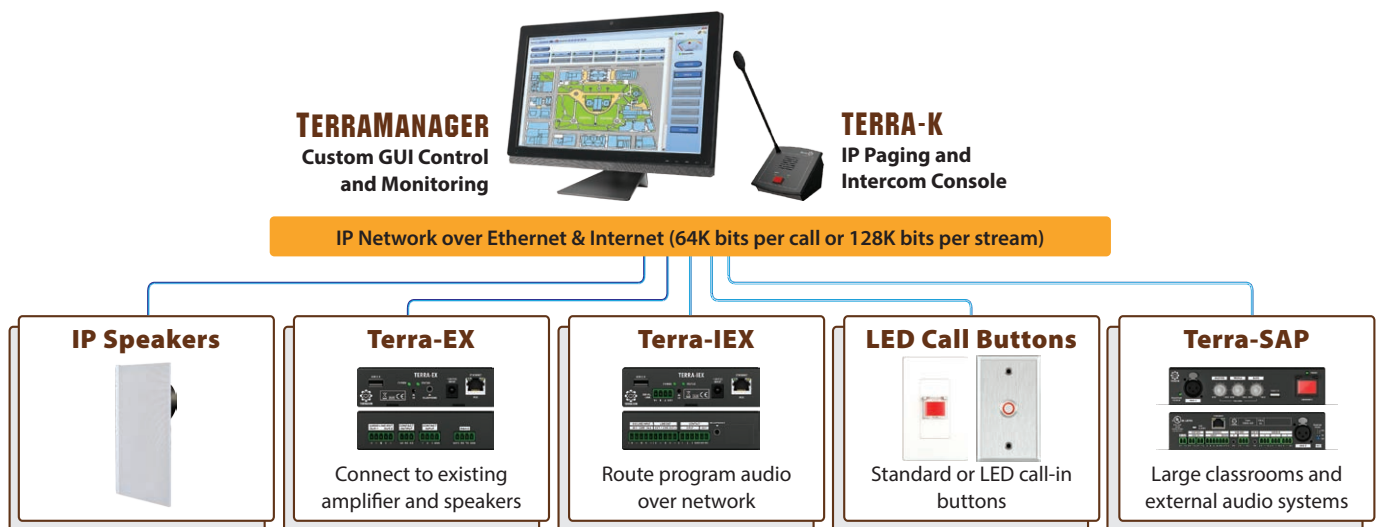
### **URC-200**

#### **Ethernet Universal Programmable Remote Controller**

- Powered over IP
- Support 3rd party commands to control the other system
- Feature a scalable knob, 2 buttons for "enter" and "back" and a full color display
- Easy integration with room control such as light turn on/off, curtain, audio control to create smart homes and offices

## TERRAMANAGER SOFTWARE

The TerraManager is an integrated, custom Graphical User Interface (GUI) software, providing Unicast/Multicast/Broadcast paging, IPS (Internet Paging Service) paging, full duplex intercom, music streaming, background music routing, message playback, recording, bell and scheduler management, TTS SVE (Text To Speech-Synthetic Voice Engine), classroom audio monitoring, program audio distribution, call-in buttons, emergency message transmission, control and status monitoring with all TERRACOM's vast line of IP speakers and products.



## FEATURES

- Support TCP, UDP, SIP, RTP and IGMP protocols
- Support paging (Unicast/Multicast/Broadcast), full-duplex intercom, message playing
- Zone button selections, including single zone, group zones
- Multi language tool
- 3rd party control via UDP, TCP and Modbus protocols
- Configurable prerecorded audio sources for zone broadcasting and bell scheduler arrangement
- Support Session Initiation Protocol (SIP)
- Event scheduler and bell management

## SYSTEM REQUIREMENTS

- CPU: > 2.5 GHz, Dual Core
- Memory: > 2 GB RAM
- Hard-Disk: > 500 GB
- Java Runtime: Java 8 update 60
- OS: Windows 7 SP1/8.1/10
- VGA Card
  - NVIDIA: GeForce100 series or higher
  - ATI: Radeon HD 4000 or higher
  - Intel: GMA 4500 or higher
- Others
  - Network Card
  - Network bandwidth: > 100Mbps





## INTUITIVE GRAPHICAL INTERFACE

The easy-to-use and configure TerraManager software is a flexible Windows-based GUI platform that can be configured as a matrix programmable and customizable soft buttons on the screen – or dynamic buttons can be actual graphic images of imported map layout of the physical building, campus, or geographical area – overlaid on image to coincide with the actual page/intercom zones for easy identification and activation. Virtually unlimited panels or screens can be created and navigation is via drop-down menu, “Quick-Link” function buttons and/or programmable Panel Link buttons that can be placed and customized anywhere within the design.



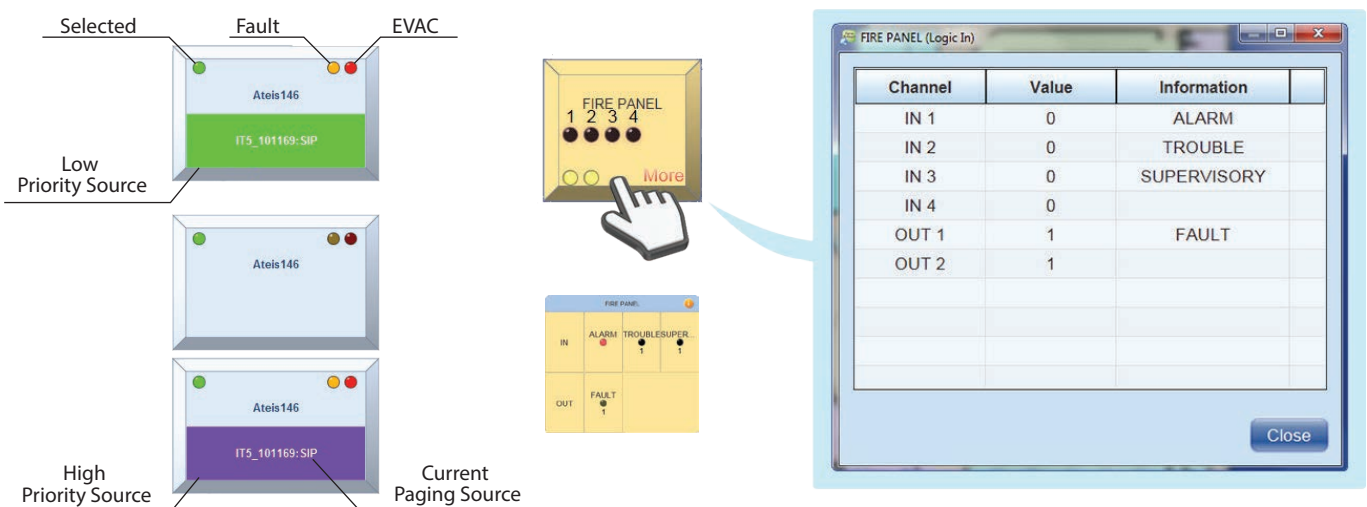
## DEVICE MANAGEMENT

The BOUTIQUE, IDA8, DIVA, Terracom and EVCS system can be easily integrated with TerraManger via LAN/WAN for network paging, intercom, control and monitor. Any device on the network can be discovered and be listed in the device management window automatically. The table-structured layout provides the user a clear view of the whole system and monitor the status of each device efficiently.

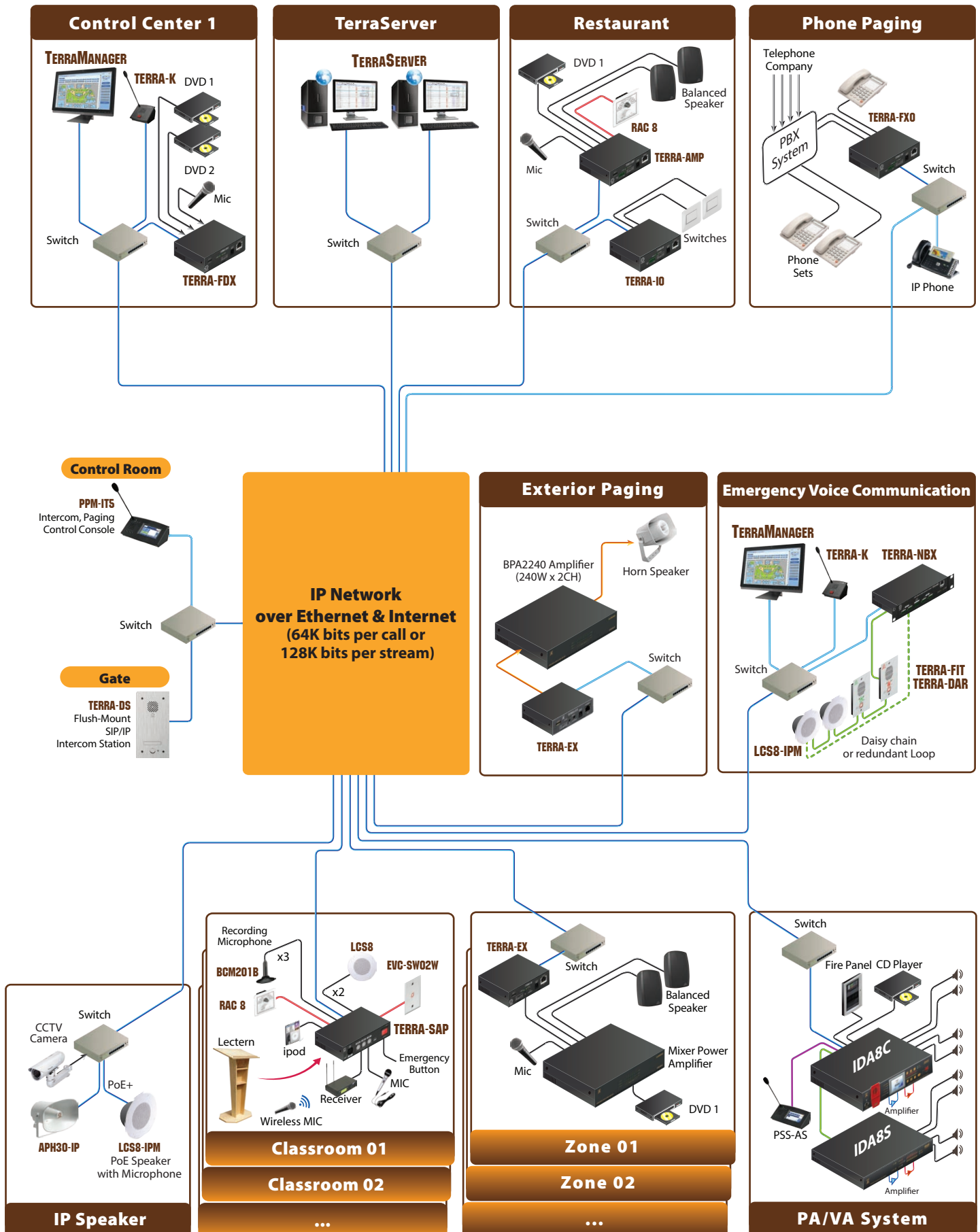
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## HIGHLY CUSTOMIZED AND FLEXIBLE BUTTONS

The highly customized and flexible button can be configured as various functions including zone selection, message/music playing, background music routing, source selection, 3rd party command string, device logic I/O control and monitor. The zone button displays the status of the fault and evacuation, multiple buttons on one page represents a global view of an area such as a building or a terminal of the airport. If a zone has been occupying a source, it's name will be displayed on the graphic of the button even the user can identify if it is a higher priority source or lower priority source of its color. Furthermore, the text and color of device I/O button LEDs can be customized.



### APPLICATION DIAGRAM



**ORDERING INFORMATION**

<b>TERRA-EX</b>	IP Audio Decoder (stereo line-OUT x 1 or mono x 2, input contact x 3 & relay output contact (NO/NC)each x 1)
<b>TERRA-EX2</b>	IP Audio Decoder (including all interfaces on TERRA-EX, plus RS232 x 1)
<b>TERRA-EX4</b>	IP Audio Decoder (including all interfaces on TERRA-EX, plus RS485 x 1)
<b>TERRA-EXU</b>	IP Audio Decoder (including all interfaces on TERRA-EX, plus USB2.0 x 1)
<b>TERRA-EXU2</b>	IP Audio Decoder (including all interfaces on TERRA-EX, plus RS232 x 1, USB2.0 x 1)
<b>TERRA-EXU4</b>	IP Audio Decoder (including all interfaces on TERRA-EX, plus RS485 x 1, USB2.0 x 1)
<b>TERRA-EXA</b>	2 x 20W (8 ohm) Amplified IP Audio Decoder (stereo OUT x 1 or mono x 2, input contact x 3, relay output contact (NO/NC) x 1)
<b>TERRA-IEX</b>	IP Audio Encoder/Decoder (mic/line-IN x 2, stereo line-OUT x 1 or mono x 2, input contact x 3, relay output contact (NO/NC)each x 1, RS232 x 1)
<b>TERRA-IE XU</b>	IP Audio Encoder/Decoder (including all interfaces on TERRA-IE X, plus USB2.0 x 1)
<b>TERRA-IE XU4</b>	IP Audio Encoder/Decoder (including all interfaces on TERRA-IE X except change the RS232 x 1 to RS485 x 1, plus USB2.0 x 1)
<b>TERRA-AMP</b>	2 x 15W (8 ohm) Amplified IP Terminal (3.5 mm stereo in x 1, mic/line x 1, stereo OUT x 1 or mono x 2, stereo line-OUT x 1 or mono x 2, input contact x 3, relay output contact x 2, RS232 x 1)
<b>TERRA-AMP4</b>	2 x 15W (8 ohm) Amplified IP Terminal (3.5 mm stereo in x 1, mic/line x 1, stereo OUT x 1 or mono x 2, stereo line-OUT x 1 or mono x 2, input contact x 3, relay output contact x 2, RS485 x 1)
<b>TERRA-K</b>	IP Based Intercom Microphone
<b>TERRA-FDX</b>	Full Duplex IP Terminal (mic/line x 2, stereo line-OUT x 1 or mono x 2, input contact x 3, relay output contact x 2, USB2.0 x 1, RS232 x 1)
<b>TERRA-FDX4</b>	Full Duplex IP Terminal (mic/line x 2, stereo line-OUT x 1 or mono x 2, input contact x 3, relay output contact x 2, USB2.0 x 1, RS485 x 1)
<b>TERRA-DS1</b>	Flush-Mount IP Door Station Intercom Unit (mic/line-IN x 1, speaker-OUT x 1, button x 1, button ext. port x1, relay output contact x 2)
<b>TERRA-FXO</b>	Full Duplex IP Terminal to Telecom Gateway (analog phone interface x 2, RS232 x 1)
<b>TERRA-FXO4</b>	Full Duplex IP Terminal to Telecom Gateway (analog phone interface x 2, RS485 x 1)
<b>TERRA-4IO</b>	IP Contact Input & Output Terminal (contact IN x 4, relay contact OUT x 4, RS232 x 1)
<b>TERRA-8IO</b>	IP Contact Input & Output Terminal (contact IN x 8, relay contact OUT x 8, RS232 x 1)
<b>TERRA-4IO4</b>	IP Contact Input & Output Terminal (contact IN x 4, relay contact OUT x 4, RS485 x 1)
<b>TERRA-8IO4</b>	IP Contact Input & Output Terminal (contact IN x 8, relay contact OUT x 8, RS485 x 1)
<b>PPM-IT5</b>	Programmable Paging Microphone InTerCom (5" panel)
<b>TERRA-RD</b>	IP-Media Console / IP Radio Receiver
<b>RAC5</b>	Remote Analog Source / Volume 5 Position
<b>RAC8</b>	Remote Analog Source / Volume 8 Position
<b>URC-200</b>	Wall-mount with 2" TFT LCD and IR receiver

## FEATURES

### Music Streaming & Routing

BGM and message routing and audio streaming using standard RTP protocol in Unicast/Multicast/Broadcast over LAN/WAN

### Intercom & Paging

Full duplex intercom, live broadcasting, paging with pre/post-chime tone (Unicast/Multicast/Broadcast) over LAN/WAN

### Telephone Paging

Support IP-PBX and IP phone via SIP protocol

### In-Stores

Central management of music playback, radio channels, messages

### Control via Web Browser

Configure, control and monitor all the system devices via web browser

### 3rd Party Control

Home & Office Automation solution can be integrated with logic control via RS232/RS485/Ethernet

## APPLICATIONS

### Medium-Sized Systems

Stores (Restaurant, Shopping Malls)  
Office/Industrial Buildings  
University Campus  
Education Institution

### Fully Integrated Large-Scale Systems

Transportation (Railways, Subways, Airport)  
Hotels/Churches/Arenas  
Museums/Theme Parks  
High-Rise Buildings



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