

# UNIWAY2200

## Hybird Gateway

In the hybrid VoIP and TDM era with diverse and growing unified communication needs, the UNIWAY VoIP Gateway uses the latest modular architecture with a built-in server. This innovation reduces time to market and efficiently introduces new applications. Its open, standardized format allows users to develop various applications, ensuring high independence and interoperability. UNIWAY's hybrid architecture supports standard protocols between network components, meeting complex communication needs. Additionally, in the Mobile Internet Era, UNIWAY optimizes R&D and integrates data, voice, and video applications, offering efficiency and cost advantages for developers.



### Key Features and Benefits

- **Flexible Configuration:**  
Supports diverse networks (FXO, FXS, T1, E1) with multimedia processing capabilities like conferencing, fax, compression, and echo cancellation. Compatible with protocols such as SS7, SIGTRAN, ISDN PRI, CAS, R1, R2, and Wireless.
- **IP-Based Compatibility:**  
With an optional built-in industrial server, UNIWAY supports all IP-based applications, including UC, IP-PBX, and Contact Centers. It also integrates with legacy PSTN networks via internal modules.
- **Scalability:**  
Modular design allows for easy configuration, system upgrades, and maintenance, supporting both low and high-density setups.
- **Multimedia Convergence:**  
Utilizes a 100M Ethernet switching chipset for media stream exchanges in IP packets, ensuring streamlined high-level applications through a Media Gateway Controller.
- **Diverse Media Resources:**  
Supports high-capacity voice playback, various Codecs, conferencing, and faxing (T.38/T.30). Optimized for IP-PBX, IVR, and ACD applications with extended IVR server or GUI management.
- **Carrier-Grade Reliability:**  
Features a special power system with standby redundancy, advanced cooling, dust protection, and internal temperature control and alert systems, ensuring robust long-term performance. No need to change wiring when replacing functional modules.

## Technical Specification:

### Functional Modules:

UMG-1016: 16 FXO, 16 FXS, or hybrid 8 FXS + 8 FXO

UMG-2030 (1E1), UMG-2060 (2E1), UMG-2120 (4E1)

Notice: 8 slots total, Optional inbuilt server

### Multimedia & Signaling:

Voice Processing: CODECs:A-law,  $\mu$ -law, PCM8, PCM16, GSM, G.729A/B, G.722, G.723, iLBC  
Supports WAV and various file formats  
Real-time recording/replay, DTMF/FSK transmission  
Echo cancellation (up to 128ms), AGC/ALS, Answer Machine Detection  
Full-duplex recording/replay, voice call recording (on-demand/permanent)  
Conversion of voice channels to conferencing or fax sessions

Signaling Protocols: E1/T1:Supports R1, R2, CAS, SIGTRAN, ISDN PRI  
Signaling redundancy, link management, call distribution/transfer  
Multiple signaling point-codes, real-time link management

### VoIP Resources:

RTP Protocol: Compliance:RTP/RTCP (RFC3551, RFC3552)  
Echo cancellation, DTMF loading (RFC2833), NAT/Firewall support

SIP Protocol: Standards Supported:IETF RFC 3261, RFC 2327, RFC 3550, RFC 2833  
UDP signaling, call holding, Digest Authentication  
NAT/Firewall tunneling, REFER call forwarding, DTMF transmission in multiple modes

### Conference/Fax Resource:

SIP-based Fax T.38 standard

Faxing rate up to 33.6Kbps, ECM support, TIFF files in MH/MR/MMR format

### Network Interface:

E1 Interface:G.703, 75 $\Omega$  unbalanced, 120 $\Omega$  balanced  
T1/J1 Interface:DSX-1, CSU line compensation, 100 $\Omega$ /110 $\Omega$  balanced  
Analog Interface:FXO, FXS, high-impedance logging  
Ethernet: 2 \* TCP/IP 1,000M Ethernet (RJ-45)

### Physical Characteristics:

Dimensions: 2U form factor: 88.1mm (H) x 482.6mm (W) x 430mm (L)  
Net Weight: About 8Kg (varies with modules)

### Power Requirement:

AC: 90-120V or 200-265V, Frequency: 50-60Hz; DC: 48V DC  
Power Consumption: < 350W (varies by configuration)

### Environment Requirement:

Operating Temperature: 0 - 40 $^{\circ}$ C; Relative Humidity: 10% - 85%  
Installation: Mount on standard 19-inch rack, Avoid dust accumulation, grounded installation

### Quality and Warranty:

Certifications:ISO 9001:2000; Warranty:Functional Module: 3 years; Lifetime Maintenance

[WWW.SYNWAY.NET](http://WWW.SYNWAY.NET)

Skirt Building, No. 1 Building,  
ZhongHeng Century Science Park, No.  
4028, NanHuan Rd, BinJiang, Hangzhou,  
China 310053



**HANGZHOU SYNWAY INFORMATION ENGINEERING CO., LTD.**

Founded in 1995 in Hangzhou, SYNWAY is a leading global provider of IP Unified Communication products including VoIP Gateways, IP PBXs and SBCs, We have been delivering more agile, efficient and affordable communication solutions and unparalleled communication experiences to our customers with our reliable, innovative and future-proof products for years. Through our value-added distributors and resellers worldwide, now SYNWAY serves telecom operators, service providers, system integrators, enterprises, SMBs and OEM partners in over 100 countries.