

FTTx Combo WAN Broadband VoIP IAD

OD Series



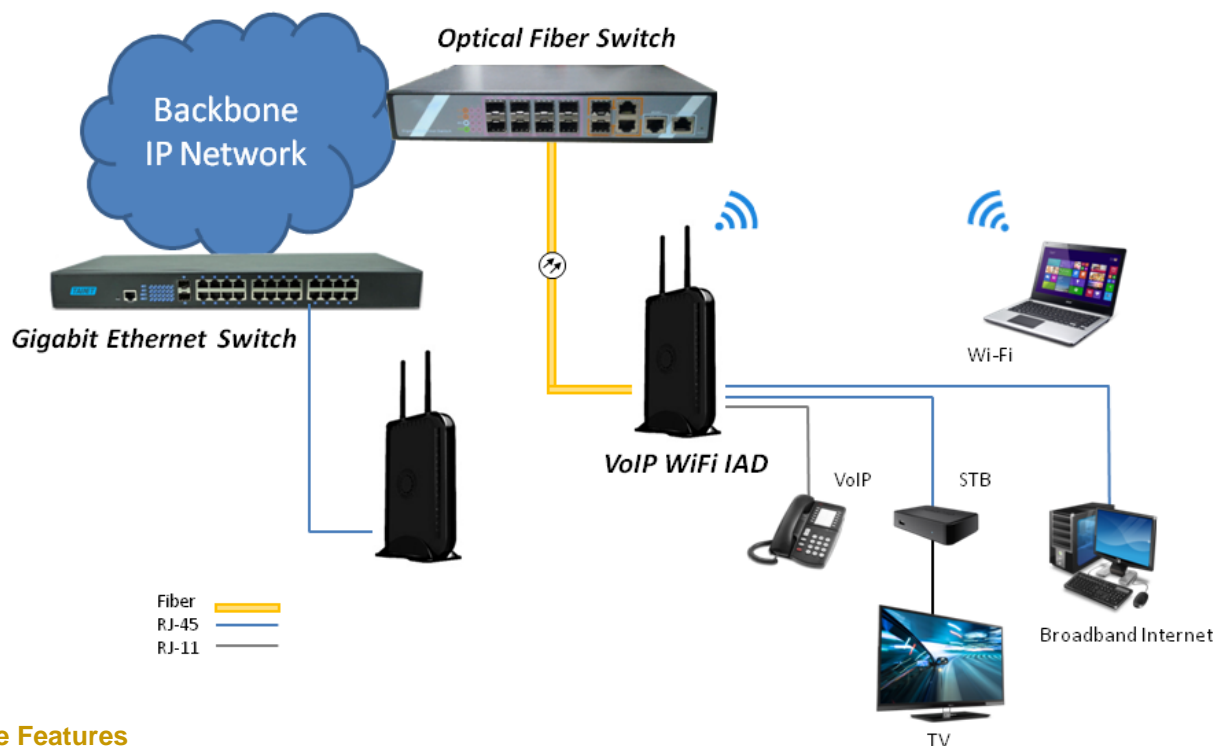
- RFC 3261 SIP protocol VoIP IAD
- 2FXS with 1PSTN or 2FXS with 1 Lifeline
- Gigabit Ethernet copper and fiber (SFP) combo
- 4 RJ-45 10/100/1000 Ethernet
- IEEE 802.11a/b/g/n/ac with 2T2R WiFi
- Interactive Voice Response (IVR)
- T.30 and T.38 compliant
- Line reversal and metering tone (12K/16KHz)
- Ethernet switch function with QoS and VLAN
- IGMP Proxy/Snooping
- Advanced calling features, 3-Way Conference with/without media server, call parking and more
- WEB based configuration (HTTP/HTTPS)
- TR-069, TR-104, DHCP Auto Provision
- SNMP V3/V2c/V1
- IPv4, IPv6 support*

OD series is a fully integrated VoIP IAD for both voice and facsimile services over the IP network. By connecting with existing FTTx, xDSL or cable modem services uses major VoIP protocols, such as SIP (RFC 3261), OD series instantly connect the data network into a toll-saving voice network, giving users all significant dollar savings over long distance and international calls.

To integrate the voice and data traffic onto the same broadband stream, OD series offers 2T2R 802.11n/ac WiFi and 4 Gigabit Ethernet LAN ports with IP sharing utilization. Combo WAN ports design allows either copper or fiber (SFP) for flexible deployment with gigabit bandwidth for voice and data traffic more efficient. By enabling the QoS/dynamic bandwidth and TOS bit management feature that guarantees the voice packets are given priority in passing through the router.

OD series 's DDNS function makes all applications possible with PPPoE and DHCP. This is the most intelligent way to implement VoIP in any kind of private or dynamic IP network environment. With built-in CDR, users are allowed to view all detailed call records, such as call duration, time, date, and latency, etc. With all such exceptional features, OD series still comes with easy, user-friendly installation and configuration procedures to make it a cinch for business and residential users to set up.





Voice Features

- G.711 a/μ-law, G.729A/B, G.726, G.723.1
- GSM 6.10 Full Rate, iLBC 13.3 kbps
- DTMF Detection and Generation
- Silence Suppression & Detection
- Comfort Noise Generation (CNG)
- Voice Activity Detection (VAD)
- Echo Cancellation (G.168)
- Adaptive (Dynamic) Jitter Buffer
- Call progress tone generation (FXS)
- Auto or Programmable Gain Control
- Inbuilt Local Mixer
- ITU-T V.152 Voice-band Data over IP Networks

SIP Method Support

- ACK, BYE, CANCEL, INFO, INVITE, MESSAGE, NOTIFY,
- OPTIONS, PING, PRACK, PUBLISH, REFER, REGISTER, SUBSCRIBE, UPDATE

SIP Call Features

- Peer to Peer Call
- Call Hold / Retrieve
- Call Waiting
- Call Pick Up
- Call Park / Retrieve (SIP Server Required)
- Call Forward - unconditional, busy, no answer
- Call Transfer - attended, unattended
- Do Not Disturb
- Speed Dialing
- Repeat Dialing
- Three-way Calling
- MWI (RFC-3842)
- Hot Line and Warm Line

SIP Account Management

- By port registration
- By device registration (share account)
- Mixed mode (Hunt number for inbound, by port number for outbound) Invite with Challenge
- Register by SIP Server IP Address or Domain Name
- Support RFC3986 SIP URI format

SIP Call Management

- Support Outbound Proxy
- SIP Registration Failover Mechanism
- Group Hunting
- Privacy Mechanism / Private Extensions to SIP
- Session Timers (Update / Re-invite)
- DNS SRV Support
- Call Types: Voice / Modem / FAX
- User Programmable Dial Plan Support
- Automatic Calling Number Manipulation
- CDR Client
- Manual Peer Table (for P2P calls)
- E.164 Numbering, ENUM support

IPTV Application

- IGMP Snooping
- Virtual LAN (VLAN)
- Quality of Service (QoS)



Telephony Specifications

- In-Band DTMF, Out-of-Band DTMF Relay (RFC2833 or SIP INFO)
- DTMF / PULSE Dial Support
- Caller ID Generation / Detection:
 - DTMF
 - FSK-Bellcore Type 1 & 2
 - FSK-ETSI Type 1 & 2
 - FSK-NTT
 - FSK: Calling Name, Number, Date and Time, vMWI
- FXS metering pulse:
 - 12kHz calling tone
 - 16kHz calling tone
- Polarity Reversal Generation (FXS)
- T.30 FAX Bypass to G.711, T.38 Real Time FAX Relay
- FXS Line test and diagnostics with visual alarm indication
- Inward self test:
 - Loopback – codec
 - Loopback – analogue
 - SLIC DC power voltage
 - Tip / Ring DC feed
 - Ringer
 - Outward Test (GR909 Standard):
 - REN
 - Phone Line disconnected
 - H.F. DC Voltage (Hazardous and foreign DC Voltage) H.F. AC Voltage (Hazardous and foreign AC Voltage) Tip / Ring Short
- ROH Tone (Receiver Off-Hook Tone @ 480 Hz)
- Loop Current Suppression

Wireless

- Compliant with IEEE 802.11b/g/n/ac standards
- 2.4 GHz/5 GHz dual-band concurrent
- Auto rate adaptive
- Multi-SSID
- Broadcast SSID control
- 64 / 128/152 bits WEP supported for encryption
- Wireless Security with WPA-PSK / WPA2-PSK
- WDS repeater function
- Universal repeater mode
- IAPP (802.11f)
- Wi-Fi Multi-Media (WMM) for AP mode
- WPS (Wi-Fi Protected Setup) for easy setup

IP Network Specifications

- WAN: Static IP, PPPoE, DHCP
- NAT Functions
 - Support up to 255 Clients
 - Port Forwarding (Virtual Servers)
 - DMZ
 - Port Triggering
- Support IPv4, IPv6 future upgradeable
- QoS Support:
- DDNS Support

Network Security Specifications

- VPN PPTP and L2TP Client
- DIGEST Authentication
- MD5 Encryption
- DoS Protection

Router Management

- Web Based Configuration
- Auto-provisioning (HTTP / HTTPS)
- Telnet
- IVR
- FTP / TFTP / HTTP Software Upgrade
- Configuration Backup and Restore
- Reset to Default Button
- TR-069/104
- SNMP V3/ V2c/ V1

Physical interface

- Combo WAN : Gigabit Ethernet copper and fiber (SFP)
- LAN : 4-port RJ-45 10/100/1000 Ethernet (GE)
- Antenna : 2T2R, 2 x 2dbi external antenna
- Telephone: 2-port FXS, 1 Lifeline or PSTN port
- Factory default reset button, WPS push button, Power jack, Power switch
- USB 2.0 Host interface

LED Indicators

- Power, Provision/Alarm, Register, WAN, WLAN(2.4G/5G), LAN1~4, USB1~2, Phone1~2(Off-hook/Channel Alarm), WPS

Dimension

- 22.6(W) x 15.5(D) x 3.3(H) cm
- Weight: 400 g

Power Requirement

- AC100~240 input, Output Adapter: 12V/2A

Environment

- Operating temperature: 0°C ~ 45°C
- Storage temperature: -25°C ~ 75°C
- Operation Humidity: Up to 90% RH, non-condensing

Model

Model	WAN	LAN	WiFi	FXS
ODC-202AC	Combo	4xGE	802.11 a/b/g/n/ac	2
ODC-202N	Combo	4xGE	802.11 a/b/g/n	2
OD-202AC	GE	4xGE	802.11 a/b/g/n/ac	2
OD-202N	GE	4xGE	802.11 a/b/g/n	2

