ECG4510-05E
FTTx P2P Active Ethernet Combo WAN Broadband IAD

Features

Voice Features

G.722, 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.165/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

IPTV Application

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

SIP Call 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 (number for outbound)
Invite with Challenge
Register by SIP Server IP Address or Domain Name
Support RFC3986 SIP URI format

SIP Account 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

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:
   Polarity Reversal
   12kHz calling tone
   16kHz calling tone
Polarity Reversal
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

For a world always connected...

Features

Wireless

Compliant with IEEE 802.11b/g/n standards
2.4 GHz - 2.484 GHz frequency range
Up to 300 Mbps wireless operation rate
AP and client mode
Auto rate adaptive
Multi-SSID
Broadcast SSID control
64/128 bits WEP supported for encryption
Wireless Security with WPA-PSK/WPA2-PSK
WDS repeater function
Universal repeater mode
Wi-Fi Multi-Media (WMM) for AP mode
WPS (Wi-Fi Protected Setup) for easy setup

Physical interface

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

LED Indicators

Power, Provision/Alarm, Register, WAN, WLAN, LAN1~LAN4,
    USB, Phone off-hook 1~2/
Phone Ch Alarm 1~2, Line, WPS

IP Network Specifications

WAN: Static IP, PPPoE, DHCP
Network Protocol Support:
    IP, TCP, UDP, TFTP, FTP, RTP, RTCP, RTCP-XR, ARP,
        RARP, ICMP, NTP, SNTP, HTTP, HTTPS, DNS, DNS SRV,
        Telnet, DHCP Server, STUN Client, UPnP, IGMP, DHCP
        Client, IGMP snooping, IGMP proxy, RTSP ALG, SIP ALG
NAT Functions
    Support up to 255 Clients
    Port Forwarding (Virtual Servers)
    DMZ
    Port Triggering
Support IPv4, IPv6 future upgradeable
QoS Support:
    WAN: DiffServ, IP Precedence
    Priority Queue
    Rate Control
    802.1Q (VLAN Tagging), 802.1p (Priority Tag)
    LAN: Rate Limit
DDNS Support
    Dyndns.org (Dynamic and Custom)

Network Security Specifications

PPTP 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

SIP, Voice and FAX Related Standard

RFC1889 RTP: A Transport Protocol for Real-Time Applications.
RFC2543 SIP: Session Initiation Protocol
RFC2833 RTP Payload for DTMF Digits, Telephony Tones and
    Telephony Signals
RFC2880 Internet Fax T.30 Feature Mapping
RFC2976 The SIP INFO Method
RFC3261 SIP: Session Initiation Protocol
RFC3262 Reliability of Provisional Responses in Session Initiation
    Protocol (SIP)
RFC3263 Session Initiation Protocol (SIP): Locating SIP Servers
RFC3264 An Offer/Answer Model with Session Description
    Protocol (SDP)
RFC3265 Session Initiation Protocol (SIP) - Specific Event
    Notification
RFC3311 The Session Initiation Protocol (SIP) UPDATE Method
RFC3323 A Privacy Mechanism for the Session Initiation Protocol
    (SIP)
RFC3325 Private Extensions to the Session Initiation Protocol
    (SIP) for Asserted Identity within Trusted Networks
RFC3362 Real-time Facsimile (T.38) - image/t38 MIME Sub-type
    Registration
RFC3515 The Session Initiation Protocol (SIP) Refer Method
RFC3665 Session Initiation Protocol (SIP) Basic Call Flow
    Examples
RFC3824 Using E.164 numbers with the Session Initiation
    Protocol (SIP)
RFC3841 Caller Preferences for the Session Initiation Protocol
    (SIP)
RFC3842 A Message Summary and Message Waiting Indication
    Event Package for the Session Initiation Protocol (SIP)
RFC3891 The Session Initiation Protocol (SIP) "Replaces"
    Header
RFC3892 The Session Initiation Protocol (SIP) Referred-By
    Mechanism
RFC3960 Early Media and Ringing Tone Generation in the
    Session Initiation Protocol (SIP)
RFC3986 Uniform Resource Identifier (URI): Generic Syntax
RFC4028 Session Timers in the Session Initiation Protocol (SIP)
Draft-ietf-sipping-service-examples-08 for call features

Features

Physical and Environmental

Dimensions (WxDxH): 222 x 146 x 33 mm (8.7 x 5.7 x 1.3 in)
Gross Weight: 480 g (1.06 lbs)
Power Source: AC 100~240V 50/60Hz input, DC 12V/2A output
Operating Temperature: 0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature: -25°C ~ 75°C (-13°F ~ 167°C)
Operation Humidity: Up to 90% RH, non-condensing

Interface

Protocol: SIP (RFC3261) Model: 1FXS 1FXO, 2FXS
Model: 2FXS
Combo WAN: Ethernet copper and fiber (SFP)
LAN: 4-port RJ-45 10/100/1000 Ethernet
Wi-Fi: IEEE 802.11b/g/n with 2T2R
Telephony Interface: RJ-11 connectors

Warranty

Please check www.edge-core.com for the warranty terms in your country.

* Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products.
* Specifications, availability and terms of offers may change without notice.

For More Information

To find out more about Edge-Core Networks products and solutions, visit www.edge-core.com.

About Edge-Core Networks

Edge-Core Networks is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edge-Core Networks delivers the software and systems that transform the way the world connects. Edge-Core Networks serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edge-Core Networks is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edge-Core data center switches are developed and manufactured by Accton.

TEL: 886-3-5638888 FAX: 886-3-6686111
No.1, Creation Rd. III, Hsinchu Science Park, Taiwan 30077
sales_ec@edge-core.com   www.edge-core.com

EC-DS-0214-01