

OpenVox IX160/160P Datasheet

OpenVox IX160/160P is a standard 19" 1U high-performance PBX solutions. Designed and rigorously tested for optimal performance, this appliance allows users to integrate up to 2 pieces of OpenVox PCI-E telephony interface cards, with any combinations of FXS/FXO, BRI, E1/T1/J1 or transcoding interfaces.

The IX160/160P adds support for i3 and i5 motherboards to provide more powerful performance and can handle up to 500 concurrent calls and thousands of user extensions. In addition, IX160/160P can integrate a variety of high-definition audio/video codecs, bringing users a high-fidelity, high-definition audio/video call experience.

The IX160/160P supports comprehensive protocol conversion, including SIP, IAX2 protocols in IP side and BRI, PRI, SS7, R2 in CPE side. Taking the full advantages of open source platform, the IX160/160P will be preloaded with OpenVox UC system, Issabel, FreePBX, VitalPBX, PBX in a Flash, Elastix® IPPBX software. The default pre-installed OpenVox UC system makes the deployment, configuration, and use of a PBX system ever easier. Getting started is a breeze with a user-friendly GUI. Powerful IX devices allow enterprises to grow while minimizing communication costs.

Typical Applications

- Optional Pre-loaded Free Open Source IPPBX System
- Combination of FXS/FXO, BRI, E1/T1/J1 Interface
- PRI/SS7/R2 to SIP Gateway
- PRI/SS7/R2/BRI/FXS/FXO Signaling Converter
- PRI/SS7/R2 TDMoE Gateway
- Flexible Applications Selection (IPPBX or Firewall)
- Zero Touch IP Phones Auto-Provisioning
- User Control Panel

Safety and Reliability

IX160/160P is a risk-free solution with built-in Redundant Power Supply (RPS) and Uninterruptible Power Supply (UPS) that keeps your system and data away from damage or lost caused by unexpected power failure.

The optional hardware RAID 1 support provides better data backup for your system. When RAID1 is installed, thus users can see the status of the storage devices and be alerted when HDD is crashed, then simply replace a backup HDD ASAP.

Combination Options

- A400E/A(E)810E/A(E)1610E/A(E)2410E
- B(E)200E/B(E)400E
- D(E)130E/D(E)230E/D(E)430E/D(E)830E/D(E) 1630E

Except A400E, all compatible cards can be applied together with EC module.

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- G.711(a-law &µ-law), G.722, OPUS, AMR-NB/WB, SILK, G723.1, G726, G729, GSM, ADPCM, iLBC, H263, H263P, H264, VP8, etc.
- Support SIP & IAX2
- Echo canceller
- Simple and Convenient Configuration via Web GUI
- User Portal
- Extension User Privileges
- System Administrators Monitor
- Event Notification
- Support Backup/Restore
- Remote Management
- Hot Standby
- System resource monitoring
- Network configuration
- Support VLAN
- Support Static Route
- DHCP server for dynamic IP
- Support Fail2ban
- Secure communications (SRTP & TLS encryption)
- Support Multiple VPN protocols including Open-VPN, L2TP, N2N, SSTP
- Import/Export Extensions
- Support SIP Forking
- Call Transfer/Forwarding/Waiting
- Follow-Me (Find me calling)/Ring Group/Queue
- Quickly Auto Provision IP Phones
- Support IMS VoLTE
- Flexible Inbound/Outbound Route
- Call Blacklisting
- Support international call restrictions

IX160/160P supports combination of two cards for example:

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- A(E)1610E + B(E)400E
- D(E)430E + B(E)400E
- D(E)430E+A(E)2410E
- D(E)430E + A(E)1610E
- A(E)810E + A(E)810E

Features

- AutoCLIP
- Time Condition
- PIN List
- Automated Attendant (IVR)
- Phonebook
- LDAP Service
- DISA (Direct Inward System Access)
- Conference bridge/service
- Call Back
- Call Parking
- Paging and Intercom
- Speed Dials
- Call Recording
- Customizable announcements
- Music On Hold
- Support Open API Protocol (based on Asterisk)
- Click2call
- WebPhone
- Access Control Interface based on ACL
- AI TTS
- Support for video calls and presence
- SIP Instant Messaging
- Voicemail
- Missed Calls Notification
- Remote SMTP Email Server
- Antispam support
- Support Mail Relay
- Fax to Email
- Hotel & Wakeup Service
- Call Detail Records (CDR)
- Billing Report

Specifications

| ModesiK160K160MA Analog Ports8Ma RA IP orts8Ma RA IP orts9Ma RA IP orts9Ma Cangended Searce300 ortsMax Conurnet Cals000 orts | IX160/160P | | | |
|---|-----------------------------------|--|-----------------------|--|
| Nak BRI Ports8Mak EI/TI/JI Ports416Max E1/TI/JI Ports800 Users2000 UsersRecommended User Capacity800 Users2000 UsersMax Concurrent Calls250 Concurrent Calls500 Concurrent CallsProtocolSIP (RFC3261), IAX2Transport ProtocolUDP, TCP, TLS, SRTPCodeeG111 (alaw/ulaw), G722, G723.1 G726, G725, GM, ADPCM, iLBC, H263, H263P, H264DTMFIn-band, RFC2833, SIP INFOPrevicesStatic IP, DHCP, VPN, Firewall, PPPoE, BridgerPrevicesStatic IP, DHCP, VPN, Firewall, PPPoE, BridgerT.38 FaxYesCPU1.83GH2 Intel® Celeron® N2930Intel® ISRAMUp to 8GB DR31.1333Up to 3GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDStorageYes (Optional)VINYes (Optional)VINYes (Optional)Power Supply100-240V ACVEs (Optional)Yes (Optional)Power SupplyNoJoslayYes (Optional)Power ConsumptionQUQuestoSupplementationOperating TemperatureOrC 125 "CStorage Temperature40"C*125 "CHumidity10 "90% NON-CONDENSINGUnimensionA10*Q30*G6.7mmNet WeightA13kg | Models | IX160 | IX160P | |
| Max E1/T1/11 Ports416Recommended User Capacit800 Users2000 UsersMax Concurrent Calls500 Concurrent Calls500 Concurrent CallsProtocolSIP (RFC3261), IAX2Transport ProtocolUDP, TCP, TLS, SRTPCodecG711 (alaw/ulaw), G722, G723.1 G726, G722- SSM, ADPCM, ILBC, H263, H263P, H264DTMFIn-band, RFC2833, SIP INFOIP ServicesStatic IP, DHCP, VPN, Firewall, PPPoE, BridgerFirewallYesCPU1.83GH2 Intel® Celeron® N2930Intel® 15RAMUp to 8GB DDR3 L 333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 Inch SATA HDDStorageYes (Optional)Min PCL=E®2NICYes (Optional)Ves (Optional)Yes (Optional)Power Supply100-240V ACUPSNoUSBalonVes (Optional)DisplayHDMILCD DisplayQuQuer ConsumptionQUQuer ConsumptionQUQuer ConsumptionCi SSCStorage Temperature-Ci SSCStorage Temperature-Ci SSCQuer ConsumptionQUQuer ConsumptionQUQuer ConsumptionCi SSCStorage Temperature-Ci SSCHumidityQ- S90% NON-CONDENSINGUnemation-Ci SSCStorage Temperature-Ci SSCHumidityQuer Consum ConsumptionQuer ConsumptionQuer Cel SSCStorage Temperature-Ci SSCHumidityQuer Cel SSC< | Max Analog Ports | 48 | | |
| Recommended User Capacity800 Users2000 UsersMax Concurrent Calls500 Concurrent Calls500 Concurrent CallsProtocolSIP (RFC3261), IAX2Transport ProtocolUDP, TCP, TLS, SRTPCodecG711 (alaw/ulaw), G722, G723.1 G726, G725.5SM, ADPCM, iLBC, H263, H263P, H264DTMFIn-band, RFC2833, SIP INFOIP ServicesStatic IP, DHCP, VPN, Firewall, PPP6F, BridgFirewallYesCPU1.83GH2 Intel® Celeron® N2930RAMUp to 8GB DDR3 1.333VIP to 8GB DDR3 1.333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 Inch SATA HDDRAIDYes (Optional)Mini PCI-E®2NICYes (Optional)VIP so (Optional)Yes (Optional)Power Supply100-240V ACRedundant Power SupplyNoIDsplayHDMILDD DisplayQuOperating TemperatureQUQUSUS2.0Quere ConsumptionGVCQuere ConsumptionCit So °CStorage Temperature40°C *125 °CHumidity10 ~90% NON-CONDENSINGUnimationMargorée.7mmNumidity10 ~90% NON-CONDENSINGUnimation40°370*66.7mmNet Weight4.3kg | Max BRI Ports | 8 | | |
| Max Concurrent Calls'500 concurrent CallsProtocolSIP (RFC3261), JAX2Transport ProtocolUDP, TCP, TLS, SRTPCodecG711 (alaw/ulaw), G722, G723.1 G726, G725, MAPCM, ILBC, H263, H263P, H264DTMFIn-band, RFC2833, SIP INFOPServicesStatic IP, DHCP, VPN, Firewall, PPPOE, BridgeFirewallYesT.38 FaxYesCPU1.83GHz Intel® Celeron® N2930Intel® ISRAMUp to 8GB DDR31 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)VIC2*10/100/000MUPSYes (Optional)Power Supply100-240V ACRedundant Power SupplyHDMILCD DisplayNoUS2 US82.02 US83.0Power Consumption20WQuery Consumption10° C0% CStorage Temperature10° °0% NON-CONDENSINGUnidity10° °0% NON-CONDENSINGUnidity10° °0% NON-CONDENSINGUnidity10° °0% NON-CONDENSINGUtweight4.13kg | Max E1/T1/J1 Ports | 4 | 16 | |
| ProtocolSIP (RFC3261), IAX2Transport ProtocolUDP, TCP, TLS, SRTPCodecG711 (alaw/ulaw), G722, G723.1 G726, G723. GTX, ADPCM, iLBC, H263, H263P, H264DTMFIn-band, RFC2833, SIP INFOPServicesStatic IP, DHCP, VPN, Firewall, PPPOE, BridgerFirewallYesT.38 FaxYesCPU1.83GHz Intel® Celeron® N2930Intel® ISRAMUp to 8GB DDR31 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)YesYesNIC2*10/1000MUPSYes (Optional)Power Supply100-240V ACRedundart Power Supply100-240V ACLCD DisplayNoUSB2 USB2.0QW60W(Maximum)Operating Temperature0°C 125 °CHumidity10° 90% NON-CONDENSINGUnimension440°370°66.7mmNet Weight4.13kg | Recommended User Capacity | 800 Users | 2000 Users | |
| Tansport ProtocolUDP, TCP, TLS, SRTPCodecG711 (alaw/ulaw), G722, G723.1 G726, G729, GSM, ADPCM, iLBC, H263, H263P, H264DTMFin-band, RFC2833, SIP INFOIP ServicesStatic IP, DHCP, VPN, Firewall, PPPoE, BridgetFirewallYesT.38 FaxYesCPU1.83GH2 Intel® Celeron® N2930Intel® i5RAMUp to 8GB DDR31 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)VIC2NIC2* 10/100/1000MUPSYes (Optional)Power Supply100-240V ACRedundant Power SupplyNoUSB2 USB2.0VISVes (Optional)USB2 USB2.0Orgenting Temperature20VOrgenting Temperature40° C* 125 °CHumidity10 * 90% NON-CONDENSINGUmmidity04° 370*66.7mmHuwinght413kg | Max Concurrent Calls [*] | 250 Concurrent Calls | 500 Concurrent Calls | |
| CodecG711 (alaw/ulaw), G722, G723.1 G726, G729, SIM, ADPCM, ILBC, H263, H263P, H264DTMFIn-band, RFC2833, SIP INFOIP ServicesStatic IP, DHCP, VPN, Firewall, PPPoE, BridgeFirewallVesT.38 FaxVesCPU1.83GH2 Intel® Celeron® N2930Intel® i5RAMUp to 8GB DDR31 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDStorageYes (Optional)Min PCLE®2NIC2* 10/100/1000MUPSYes (Optional)Power Supply100-240V ACRedundant Power SupplyNoUSB2 USB2.0QVOstalOperating Temperature20VOperating Temperature-40°C~125°CHumidity10° 90% NON-CONDENSINGDimension440°370°66.7mmNetWeight413kg | Protocol | SIP (RFC3261), IAX2 | | |
| DTMFIn-band, RFC2833, SIP INFOIP ServicesStatic IP, DHCP, VPN, Firewall, PPPoE, BridgetFirewallYesT.38 FaxYesCPU1.83GHz Intel® Celeron® N2930Intel® i5RAMUp to 8GB DDR31 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)Min PCI-E®2NIC2* 10/100/1000MUPS2* 10/100/1000MPower Supply100-240V ACRedundant Power Supply100-240V ACLD DisplayNoUS2 USB2.0QS2 USB2.0Ower Consumption20WQover Consumption20WQover Consumption20WQover Consumption20% Contionel)Operating Temperature40°C ~ 125 °CHumidity10~ 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | Transport Protocol | UDP, TCP, TLS, SRTP | | |
| IP ServicesStatic IP, DHCP, VPN, Firewall, PPPoE, BridgetFirewallYesT.38 FaxYesCPU1.83GHz Intel® Celeron® N2930Intel® i5RAMUp to 8GB DDR31 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)Min PCI-E*2NIC2* 10/100/1000MUPS2* 10/100/1000MUPS100-240V ACPower Supply100-240V ACRedundant Power SupplyYes (Optional)LDD DisplayNoUSS2 USS2.0Quer Consumption20WQuer Consumption20WOperating Temperature10° 20° CStorage Temperature10° 20% NON-CONDENSINGHumidity10° 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | Codec | G711 (alaw/ulaw), G722, G723.1 G726, G729, GSM, ADPCM, iLBC, H263, H263P, H264 | | |
| FirewallYesT.38 FaxYesCPU1.83 GHz Intel® Celeron® N2930Intel® i5RAMUp to 8GB DDR3L 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)Mini PCI-E®2NIC2* 10/100/1000MUPsYes (Optional)Power Supply100-240V ACRedundant Power SupplyYes (Optional)USB2 USB2.0USB2 USB2.0Opter Consumption20WOperating Temperature0°C to 50 °CStorage Temperature40°C 7125 °CHumidity10 ~ 90% NON-CONDENSINGDinension40°370*66.7mmNet Weight4.13kg | DTMF | In-band, RFC2833, SIP INFO | | |
| T.38 FaxYesCPU1.83GHz Intel® Celeron® N293OIntel® 15RAMUp to 8GB DDR3 L 1333Up to 32GB DDR4 2400RAMMSATA SSD and 2.5 inch SATA HDDStorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)Mini PCI-E®2NIC2* 10/100/1000MUPSYes (Optional)Power Supply100-240V ACRedundant Power Supply100-240V ACLD DisplayHDMILCD DisplayNoUSB2 USB2.02 USB3.0Power Consumption20W60W(Maximum)Operating Temperature0^* C 125 °CHumidity10 ~ 90% NON-CONDENSINGDinension440*370*66.7mmNetWeight4.13kg | IP Services | Static IP, DHCP, VPN, Firewall, PPPoE, Bridge | | |
| CPU1.83GHz Intel® Celeron® N2930Intel® i5RAMUp to 8GB DDR3L 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)Mini PCI-E®2NIC2* 10/100/MOMUPSYes (Optional)Power Supply100-240V ACRedundant Power Supply100-240V ACDisplayHDMILCD DisplayNoUSB2 USB2.02 USB3.0Power Consumption20W60W(Maximum)Operating Temperature40°C ~ 125 °CHumidity10~ 90% NON-CONDENSINGHumidity14°370°66.7mmWeight413g | Firewall | Yes | | |
| RAMUp to 8GB DDR3L 1333Up to 32GB DDR4 2400StorageMSATA SSD and 2.5 inch SATA HDDRAIDVes (Optional)Mini PCI-E*2NIC2* 10/1000MUPSVes (Optional)Power Supply10-240V ACRedundant Power Supply10-240V ACDisplayHDMILDD DisplayNoUSB2 USB2.0Power Consumption20WOperating Temperature-0°C to 5°CStorage Temperature40°C * 125 °CHumidity10 ~ 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.3kg | T.38 Fax | Yes | | |
| StorageMSATA SSD and 2.5 inch SATA HDDRAIDYes (Optional)Mini PCI-E*2NIC2* 10/100/1000MUPSYes (Optional)Power Supply100-240V ACRedundant Power Supply100-240V ACDisplayHDMILCD DisplayNoUSB2 USB2.0Qwer Consumption20WOperating Temperature0°C to 50 °CStorage Temperature10° -90% NON-CONDENSINGLimidity10° -90% NON-CONDENSINGMini PCI-E*1.13kg | СРИ | 1.83GHz Intel [®] Celeron [®] N2930 | Intel [®] i5 | |
| RAIDYes (Optional)Mini PCI-E*2NIC $2*10/100/1000M$ UPSYes (Optional)Power Supply $100-240V AC$ Redundant Power Supply $Yes (Optional)$ DisplayHDMILCD DisplayNoUSB $2 USB2.0$ $2 USB3.0$ Power Consumption $0^{\circ}C to 50 {}^{\circ}C$ Storage Temperature $0^{\circ}C to 50 {}^{\circ}C$ Storage Temperature $10^{\circ} 90\% NON-CONDENSING$ Dimension $440^*370^*66.7mm$ Neight $4.13kg$ | RAM | Up to 8GB DDR3L 1333 | Up to 32GB DDR4 2400 | |
| Mini PCI-E*2NIC2* 10/1000MUPSYes (Optional)Power Supply100-240V ACRedundant Power SupplyYes (Optional)DisplayHDMILCD DisplayNoUSB2 USB2.02 USB3.0Power Consumption0°C to 50 °CStorage Temperature-40 °C ~ 125 °CHumidity10~ 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | Storage | MSATA SSD and 2.5 inch SATA HDD | | |
| NIC 2* 10/1000M 2*10/000M 740 540 540 540 540 540 540 540 540 540 5 | RAID | Yes (Optional) | | |
| UPSYes (Optional)Power Supply100-240V ACRedundant Power SupplyYes (Optional)DisplayHDMILCD DisplayN0USB2 USB2.02 USB3.060W(Maximum)Operating Temperature0°C to 50 °CStorage Temperature40 °C ~ 125 °CHumidity10 ~ 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | Mini PCI-E ^{**} | 2 | | |
| Power Supply100-240V ACRedundant Power SupplyYes (Optional)DisplayHDMILCD DisplayNoUSB2 USB2.02 USB3.0Power Consumption20W60W(Maximum)Operating Temperature0°C to 50 °CStorage Temperature10~90% NON-CONDENSINGHumidity10~90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | NIC | 2* 10/100/1000M | | |
| Redundant Power Supply Yes (Optional) Display HDMI LCD Display No USB 2 USB2.0 2 USB3.0 Power Consumption 20W 60W(Maximum) Operating Temperature -40 °C ~ 125 °C | UPS | Yes (Optional) | | |
| DisplayHDMILCD DisplayNoUSB2 USB2.02 USB3.0Power Consumption20W60W(Maximum)Operating Temperature0°C to 50 °CStorage Temperature-40 °C ~ 125 °CHumidity10 ~ 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | Power Supply | 100-240V AC | | |
| LCD Display No USB 2 USB2.0 2 USB3.0 Power Consumption 20W 60W(Maximum) Operating Temperature 0°C to 50 °C Storage Temperature -40 °C ~ 125 °C Humidity 10 ~ 90% NON-CONDENSING Dimension 440*370*66.7mm Net Weight 4.13kg | Redundant Power Supply | Yes (Optional) | | |
| USB2 USB2.02 USB3.0Power Consumption20W60W(Maximum)Operating Temperature0°C to 50 °C | Display | HDMI | | |
| Power Consumption20W60W(Maximum)Operating Temperature0°C to 50°C | LCD Display | No | | |
| Operating Temperature0°C to 50 °CStorage Temperature-40 °C ~ 125 °CHumidity10 ~ 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | USB | 2 USB2.0 | 2 USB3.0 | |
| Storage Temperature-40 °C ~ 125 °CHumidity10 ~ 90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | Power Consumption | 20W | 60W(Maximum) | |
| Humidity10~90% NON-CONDENSINGDimension440*370*66.7mmNet Weight4.13kg | Operating Temperature | 0°C to 50 °C | | |
| Dimension 440*370*66.7mm Net Weight 4.13kg | Storage Temperature | -40 °C ~ 125 °C | | |
| Net Weight 4.13kg | Humidity | 10 ~ 90% NON-CONDENSING | | |
| | Dimension | 440*370*66.7mm | | |
| Warranty 2 Years | Net Weight | 4.13kg | | |
| | Warranty | 2 Years | | |

*Maximum number of calls tested under laboratory conditions.

** When equipped with RAID, only one PCI-E board can be inserted, and only the lower slot is supported.