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2023 SAMPLE

ACCESS NETWORK TRANSMISSION EXPERT

COMPANY PROFILE

Hangzhou Prevail Communication Technology Co., Ltd. (hereinafter referred to as the "Company") was established in November 2019 and is located in Guali Town, Xiaoshan District, Hangzhou City, Zhejiang Province, with a registered capital of RMB 50 million. The company currently has over 400 registered employees, of which over 40% have college degrees education level or above. The company is a wholly-owned subsidiary of the listed company Hangzhou Prevail Optoelectronic Equipment Co., Ltd. (stock code: 300710). The company is dedicated to the research and development, production, sales, and delivery of communication equipment, optical communication equipment, mobile terminal equipment, and IOT smart systems. It is a technology innovation oriented company that provides technical services. The company firmly positions independent research and development as its core development strategy. We have established and owned an experienced and innovative technology research and development team.

With years of accumulation in the CATV equipment manufacturing industry, the company's related product technology, performance, and research and development level are all in a leading position in the same industry, and have received praise and trust from numerous users both domestically and internationally. At the same time, under the policy of “Triple Play” and “Broadband China", based on the company's complete product line, independent research and development, and continuous technological innovation capabilities, the company has become a capable leading enterprise in the industry that provides comprehensive solutions for CATV network equipment and data communication systems for CATV operators.

The company has established a sound modern corporate governance structure, possesses a comprehensive modern enterprise management system, and has passed ISO9001 quality certification management system, certification of ISO14001 environmental management system and ISO45001 occupational health and safety management system.

The company adheres to the craftsmanship spirit of "persistent focus, refine on, quality first, meticulousness, and pursue excellence" to meet the people’s needs of the new era for a better life. It is the company's first mission to provide information transmission faster, more stable and smarter. The company are always serving customers’ needs and customers’ interests. Constantly innovate and never stop.

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01

Data Broadband Access Equipment xPON

WXGP5000-05E Rack Mounted XG(S) PON/GPON OLT

WXGP5000-05E GPON OLT is a frame mounted GPON/XG(S) PON master OLT device that complies with ITU-T G.984/G.987/G.988 communication industry standards and China Telecom GPON equipment technical requirements CTC2.0. With GPON/XG (S) PON optical network units (ONUs), it provides users with various comprehensive services such as broadband, voice, video and monitoring access.

Feature

- Fully compliant with ITU-T G.984/G.987/G.988 standards, with good interoperability.
- GPON/XG(S)PON multi-service unified platform, convenient for subsequent network upgrade and technology evolution.
- Dual master control, dual power supply redundancy, PON backbone fiber protection.
- 5U 19-inch chassis, supports up to 80*GPON ports/ 40*XG(S)PON&GPON ports.
- Reasonable size, high density, low power consumption.
- Modular design, all boards support hot swap.
- Rich Layer 2 Functions.
- Powerful QoS function to ensure service quality.
- Unified network management platform.
- Standard OMCI remote deployment and management of user terminals.

WGP5000-08FB Outdoor GPON OLT

WGP5000-08FB is an outdoor 8-port GPON OLT device. It can be built-in an EDFA fiber amplifier. The product follows the ITU-T G.984/G.988 technical standard. The product has good openness, high reliability and complete software functions. And it can be flexibly compatible with any brand of ONT. The product is suitable for outdoor harsh environment, resistant to high and low temperature, and can be widely used in operators' field FTTH access, video surveillance, enterprise network, Internet of Things (IOT), etc.

Feature

- GPON OLT provides 8 GPON ports downlink.
- Provide 4*10GE/GE adapative SFP + 1GE RJ45.
- Can be equipped with EDFA (optional).
- Support SLA and DBA, 1:128 maximum splitting ratio.
- Support different types of ONU networking.
- Suitable for various needs such as triple play, video networking, company LAN, WAN network, etc.

WGP5000-04P/08P/16P GPON OLT

WGP5000 is highly integrated, medium-capacity GPON OLT for operators, ISPs, enterprises and park applications.The product follows the ITU-T G.984/G.988 technical standard. The product has good openness, strong compatibility, high reliability, and complete software functions. It can be widely used in operators' FTTH access, VPN, government and enterprise park access, campus network access, etc. WGP5000 is only 1U in height, easy to install and maintain, and save space. Supports mixed networking of different types of ONUs, which can save a lot of costs for operators.

Feature

- Rich Layer 2/3 switching features and Flexible management methods.
- Support multiple link redundancy protocols such as FlexLink/STP/RSTP/MSTP/ERPS/LACP.
- Support RIP, OSPF, BGP, ISIS and IPV6.
- Safe DDOS and virus attack protection.
- Support power redundancy backup, modular power supply.
- Support power failure alarm.
- Support Type C management interface.

WXGP4200-S series 10G XPON ONU

WXGP4200-S series terminal products are mainly used for FTTH, FTTB, FTTC and other scenarios. They can be used for optical fiber to building network access, video monitoring, WIFI hot spot deployment and other applications. Based on 10G-XPON technology, 10 Gigabit of uplink bandwidth is provided for users to meet ultra-high bandwidth business needs.

Feature

- Uses 10G-XPON to connect to meet IEEE802. 3av standard.
- PON port supports asymmetric (upstream 1.25 Gbps/2.5Gbps ,downstream 10 Gbps) transmission mode.
- Provides 4 GE Ethernet user interfaces.
- Supports layer 2 speed-limiting forwarding.
- Supports Ethernet line performance statistics.
- Powerful QOS capability to ensure the quality of service in a multi-business environment.
- Support OAM remote management and configuration.

WXGP4200-W-18 10G+Wi-Fi 6 XPON ONU

WXGP4200-W-18 is an optical network unit specially designed to meet high broadband access requirements. Mainly used in FTTH/FTTB scenarios, providing data, voice and video services based on XG-PON technology. Built with the latest generation of Wi-Fi 6 technology. Equipped with OFDMA, providing up to 1.8Gbps speed, 4 times faster than 11ac technology, fully compliant with the next-generation Wi-Fi 6 (IEEE802.11ax) standard, ITU-TG.987.x/988 technology standard, and has good compatibility with third-party OLT of interoperability. This product has the characteristics of high bandwidth, high reliability, wide network coverage, QoS guarantee, OMCI management, flexible network expansion and so on. With smart routing, you get top-notch network security with the latest WPA3, protecting your family from malware, password theft, identity theft and hacking. Users can install various applications by themselves, control the bandwidth, the number of Internet users, browse the web and Internet time, and have a powerful USB sharing function. The device is cost-effective, easy to deploy, and easy to manage, making it a leader in the new generation of smart gateways.

Feature

- Plug and play, integrated auto-detection, auto-configuration and auto-firmware upgrade.
- Support 1*USB3.0
- Supports multiple SSIDs, compatible with 802.11 b/g/n/a/ac/ax protocols. Wireless speed up to 1800Mbps.
- OFDMA to increase the capacity and efficiency of network in order to connect more devices without slowing down your Wi-Fi.
- TWT (Target Wake Time) technology reduces the power consumption of the device to prolong battery life.
- MU-MIMO technology allows simultaneous transmission of data to multiple devices.
- Support WPA3 wireless security protocol to ensure network security.
- Support downlink 9.953Gbps, uplink 2.488Gbps, transmission distance up to 20Km.
- Supports OMCI and OAM remote management, including configuration, alarming, performance monitoring, fault isolation and security management.
- Friendly Web GUI.
- Support IPv4/IPv6 IGMP Snooping and MLD Snooping.
- Supports 128-bit encryption for uplink and downlink AES links.
- The maximum splitting ratio supported is 1:156.
- Support SIP/H.248 voice protocol.

WE(G)P3200 series ONU

WE (G) P3200 series ONU devices can provide 1 E(G)PON uplink fiber optic interface, 1 or more GE/FE adaptive ports, and can built-in 1 CATV optical receiving unit that supports WIFI function, It can match with our company's E(G)PON OLT products and EMS network management system to provide users with a complete broadband, voice, and video multi-service access solution based on E(G)PON technology.

Feature

- Supports dual fiber/single fiber access, pluggable ONU units , with a maximum coverage radius of 20KM.
- CATV units up to 1GHz frequency, and support optical AGC function.
- The EPON part complies with the IEEE802.3ah standard and China Telecom EPON technical requirements V2.1/V3.0.
- Fully compatible with ITU-TG.984, using GPON uplink and downlink.
- Support OMCI+TR069 management mode.
- Ethernet self negotiation and MDI/MDIX automatic detection function.
- Rich VLAN and multicast functions, and supports data encryption and mutual isolation between different data ports.
- Plug and play, with functions such as automatic discovery, automatic configuration, and automatic upgrade, and support OAM remote configuration management.
- Supports network management platform EMS unified network management based on SNMP protocol. can communicate well with third-party OLT platforms.
- Supports port monitoring, port speed restriction, port SLA and other functions.
- Full line speed non blocking switching.
- Support automatic polarity identification (AUTO MDIX) for network interfaces.
- Supports IGMP snooping and controllable multicast.
- Support 802.1p priority scheduling.
- Supports 4K VLAN, VLAN tagging processing, stream classification and packet filtering, STP/RSTP protocol, and other functions.
- Supports DHCP Option60 to report physical location information of Ethernet interfaces Support PPPoE+ function for precise user identification.
- Support multicast/QoS, support IGMP Snooping.
- Support AES-128 encryption algorithm, support key generation and switching.
- Support a dual management mode based on DBA technology and priority, ensuring the minimum specified bandwidth requirements of users.

Main Parameter

- EPON maximum splitting ratio 1:64, GPON maximum splitting ratio1:128. Maximum coverage radius 20km.
- EPON transmission rate 1.25 Gbps (symmetrical uplink/downlink), GPON transmission rate uplink 1.25Gbps, downlink 2.5Gbps.
- PON port receiving optical sensitivity: -27dBm.
- CATV receiving optical power range: -15~+2dBm/-18~+2dBm.
- AGC range can low to -18dBm.
- WIFI executive standards: IEEE 802.11b/g/n.
- Operating voltage: DC +12V.
- Operating temperature: 0~+50℃.

Main Equipment Models:

Model	General Characteristics
WE(G)P3200-S (Pure data)	Power Consumption: ≤ 4.3W。 Dimension: 150mm(L) x 120mm(W) x 38mm (H)
WE(G)P3200-C (Data+CATV two-in-one Dual fiber)	Power Consumption: ≤5.3W。 Dimension: 175mm(L) x130mm(W) x 35mm (H)
WE(G)P3200-W (Data+WIFI two-in-one)	Power Consumption: ≤5W。 Dimension: 150mm(L) x 140mm(W) x 38mm (H)
WE(G)P3200-C-W (Data+WIFI+CATV three-in-one Dual fiber)	Power Consumption: ≤6W。 Dimension: 185mm(L) x 145mm(W) x 35mm (H)
WE(G)P3200-T (Data+CATV two-in-one Single fiber)	Power Consumption: ≤5.3W。 Dimension: 175mm(L) x130mm(W) x 35mm (H)
WE(G)P3200-T-W (Data+WIFI+CATV three-in-one Single fiber)	Power Consumption: ≤6W。 Dimension: 185mm(L) x 145mm(W) x 35mm (H)
WE(G)P3200-S-01 (Single port pure data)	Power Consumption: ≤3W。 Dimension: 90mm(L) x 70mm(W) x 25mm (H)

WXP3200-S-01 XPON ONU

WXP3200-S-01 is a residential gateway device with routing functions for XPON ONU and LAN Switch for residential and SOHO users, which is in line with ITU-T G.984 and IEEE802.3ah. The uplink of WXP3200-S-01 provides one PON interface, while downlink provides one Ethernet. It can realize optical access solutions such as FTTH (Fiber To The Home) and FTTB (Fiber To The Building). It fully integrates the reliability, maintainability and security design of carrier-grade equipment, and provides customers with the last kilometer of broadband access to residential and corporate customers.

Feature

- Comply with ITU-T G.984/G.988.
- Support for the ONT registration mechanism.
- Support DBA .
- Support FEC.
- Support link encryption.
- Supports the maximum effective transmission distance of 20 km.
- Support optical power detection.
- Support WAN config, IPOE PPPOE Bridge mode.
- IGMP V2 Proxy/Snooping.
- Support web management.
- Support CLI/Telnet management.
- Support port loopback detection.
- Support connection with the third party OLT and its proprietary protocols.

WGP3200-DW Dual-band GPON ONU

WGP3200-DW series provide 1 GPON optical port, 4 10/100/1000M adaptive Ethernet interfaces, 1 voice interface, and 1 CATV interface, supporting 802.11ac dual-band Wi Fi (2.4GHz and 5.8GHz), providing the best wireless connection at 2.4GHz 300Mbps and 5GHz 867Mbps. It is flexible in application, plug and play, providing users with high-quality voice, data, and high-definition video services. WGP3200-DW fully complies with the ITU-T G984 standard and has good compatibility with third-party vendor OLT. The product integrates layer switching functions, and has strong business capabilities, high reliability, and high scalability. This product is suitable for fiber optic access to resident networks and enterprise LAN network applications, with high cost-effectiveness, providing an ideal terminal solution and future business support capabilities for FTTH deployment.

Feature

- Comprehensive PON service, supporting mainstream chipset OLT compatibility, supporting mainstream OLT hybrid networks.
- Supporting port monitoring, port mirroring, port rate restriction, etc.
- Supporting Ethernet port polarity automatic detection (auto MDIX).
- Supporting IMSSIP/SIP/H.248 protocol.
- Supports multiple voice service channels.
- Support 802.11ac dual-band Wi-Fi (2.4GHz and 5.8GHz).
- Provide up to 1200Mbps wireless transmission rate.
- Support bridge mode, routing mode, bridge/path hybrid mode.
- Support static configuration of multiple working modes such as static IP, DHCP, PPPoE.
- Support DBA (Dynamic Bandwidth Allocation), support powerful QoS functions, support IGMP monitoring and controllable multicast .
- Support rich OMCI remote configuration and maintenance functions.
- Centrally manage ONU configuration and alarm functions, Supports batch upgrade of ONU software, simplifies operation and maintenance management.
- Supports WEB management, supports multiple management methods such as CLI and Telnet.
- Supports TR069 protocol, and has network management and WEB interface.
- Plug and play, making installation convenient.

WGP3200-S-04G XPON ONU

WGP3200-S-04G is an XPON optical network terminal product. The ONU adopts an EPON/GPON compatible chip scheme with single fiber input, providing 1*GEPON optical access for the uplink and 4*10/100/1000Mbps adaptive Ethernet interfaces for the downlink. This product supports remote management, maintenance and configuration by connecting with OLT that meets interoperability standards. It also supports Telnet remote maintenance and management, as well as software online upgrade functions. It can meet the different networking needs of telecommunications, radio and CATV operators, and enterprise FTTH network construction.

Feature

- Fully compatible with IEEE802.3ah and ITU-T G.984 standard.
- Supporting up to 20km transmission distance.
- Support data encryption, broadcast encryption, VLAN configuration, etc.
- Support dynamic bandwidth allocation (DBA).
- Supports ONU automatic discovery/ link detection/ remote software upgrade.
- Supports port forwarding configuration.
- Supports port speed limit and bandwidth control.
- Supports power outage alarm.
- Supports configuring QoS functions .
- Supports port isolation.
- Supports port MAC address learning.
- Supports ACL.
- Supports 1Pv4 protocol packet transparent transmission.
- Support WEB management, support TELNET/(HGU) TR069/OMCI/OAM multiple protocol management.

WR3000-18 WIFI 6 Router

WR3000-18 adopts the MTK MT7561DU scheme. Downlink provides 3*GE interfaces, uplink provides 1*GE interface, 1*USB3.0, 2x2 dual-frequency wireless combined network speed up to 1800Mbps. The wireless is based on 802.11ax (Wi-Fi6) technology, and compared to traditional Wi-Fi, it combines OFDMA and MU-MIMO technologies to effectively allocate channels, with lower latency while communicating with multiple devices, and multi-device transmission is theoretically 4 times faster.

Feature

- WIFI 6 router device.
- Provide 1*100/1000M adaptive WAN port.
- Provide 3*100/1000M adaptive LAN port.
- Provide 1*3.0USB interface.
- 2x2 dual band wireless combination network speed up to 1800Mbps.
- Wireless based on 802.11ax (WiFi 6) technology.

XPON ONU Stick: WGP3200-M

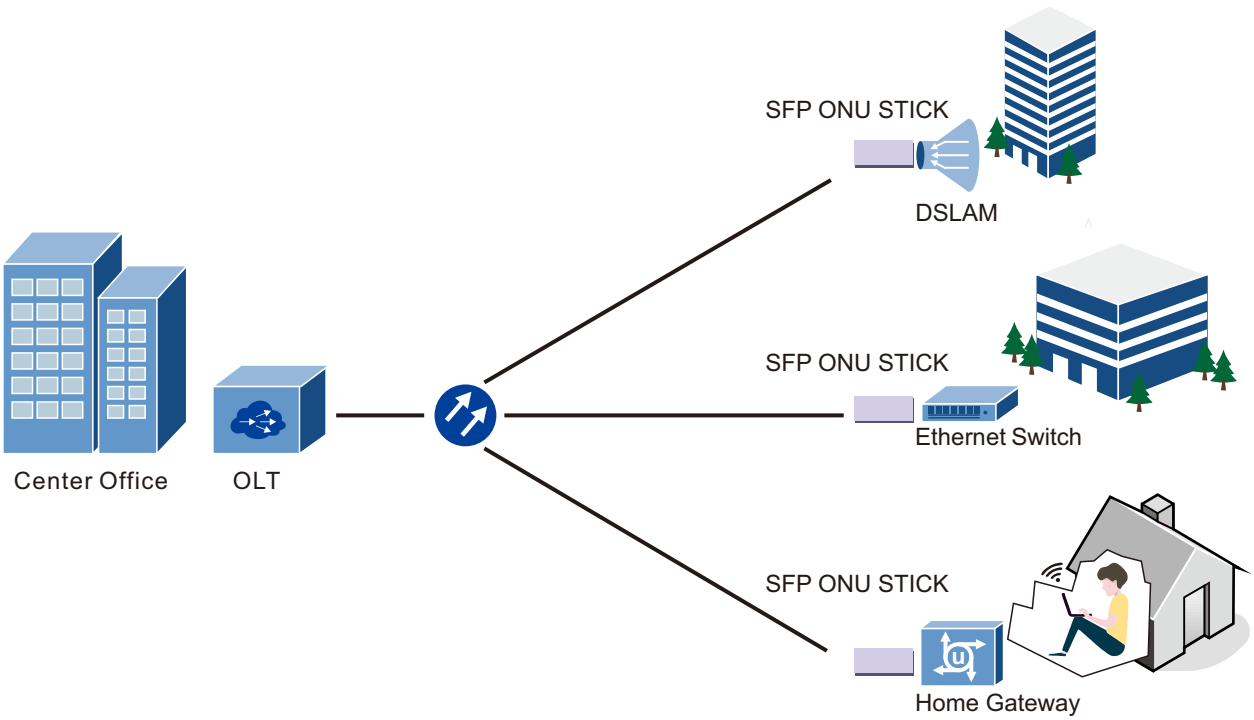
Feature

- Single fiber bi-directional data links GPON ONU and EPON ONU application with XPON MAC function.
- SC/UPC receptacle SFP with PON ONU MAC inside,"Plug-and-play" via auto-discovery and configuration.
- 1310nm DFB burst mode transmitter, 1490nm TIA continuous mode receiver.
- Single 3.3V power supply.
- Digital diagnostic monitor interface compatible with SFF-8472.
- SFP MSA compliance.
- Low EMI and excellent ESD protection.
- Class I laser safety standard IEC-60825 compliant.
- RoHS compliance.
- XPON stick compatible with GPON and EPON system.
- Complies with SFP Multi-Source Agreement (MSA) SFF-8074i.
- Complies with ITUT-T G.984.2, G.984.2 Amendment 1.
- Complies with ITUT G.988 ONU management and control interface (OMCI) specification.
- Complies with IEEE802.3ah.

Application

1. Passive Optical Networks (PON)

2.The product is an MSA-compliant SFP that incorporates not just the optics for an ONU, but all of the electronics need as well. It is a "PON on a Stick" that an entire FTTH ONU in a slightly oversized SFP. It can be plugged into networking equipment. Allowing the data interfaces on a switch, router, etc. to be customized for different fiber environments and distance requirements

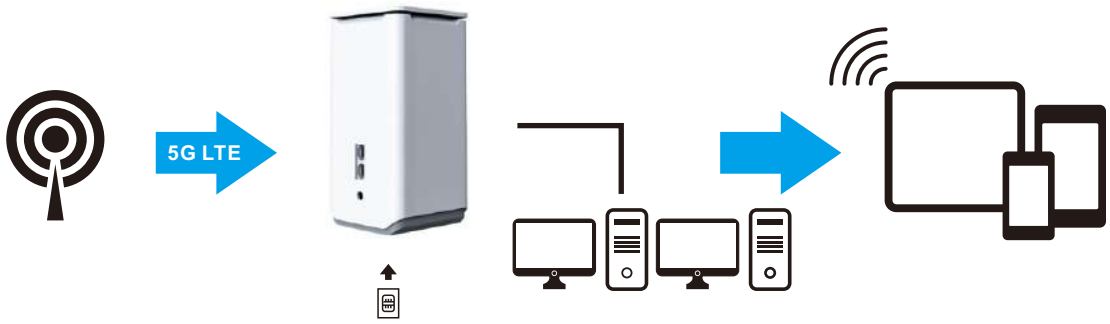


WL-CPE1800 5G LTE Wi-Fi 6 Router

Feature

- 1 WAN port: 1xRJ45, 10/100/1000Mbps.
- 2 LAN ports: 2xRJ45, 10/100/1000Mbps.
- 1 NANO SIM card interface.
- 2.4/5G two antennas, 5G LTE six antennas.
- Router mode and 5G mode can be set.

Application Block Diagram



5G Switch to Wi-Fi, Multiple Devices Share the 5G signal Anytime

Just need to insert the 5G SIM card, All of non-5G communication module of mobile phone, tablet PC, laptop, and other portable devices can infinitely access 5G high speed Internet, also support with access to 1000Mbps Ethernet port by cable.

Dual Mode 5G and Full Netcom, Covering Global Universal Bands

Support with 5G/4G netcom, even in limited spectrum area, can make full use of network resources, to be compatible with SA and NSA pattern. Can also be flexible adaptation under the different operators network deployment.

Multi-device Share the Internet Simultaneously

Wi-Fi 6 is the new generation of Wi-Fi standard, can provide higher transmission rate for devices and communications, lower network latency, wider coverage than last generation.

02

HFC Transmission Equipment

WOS-4000 Optical Communication Platform

WOS-4000 provides powerful function and flexible configuration in HFC optical data transmission solutions. The standard 4RU metal rack contains sixteen compact slots and each can be installed any functional module able to perform hot plug. Built-in dual-power hot backup, efficient fan cooling and appropriate redundant backup of functional modules contribute to carrier-class reliability. The CMM management unit provides a friendly HMI with LCD displaying the operating status of each module in real time and convenient parameter setting. The network management software conforming to the SNMP protocol is offered to achieve remote management and automatic monitoring

1550nm EDFA ：WOS-WE-1550

- Low-noise pump laser, high performance Er-doped fiber.
- Optional WDM.
- Optical Input Range: -5 ~ +10 dBm.
- Optical Output Power: +13 ~ +24 dBm.
- Output adjustable: 0~4dB, 0.1dB stepping.
- Input and output optical power status indicator.

1550nm Direct Modulated Transmitter：WOS-WT-1550

- Advanced electronic dispersion compensation, longest distance is up to 50km.
- Optional WDM.
- Optional ITU standard wavelength, Output Power: 4~10mW.
- AGC and MGC gain control modes can be switched.
- 1.2GHZ band, support DOCSIS 3.1 system.
- Two RF inputs with high isolation.
- C/N≥50dB @-1dBm. C/CTB ≥65dB, C/CSO ≥ 60dB.

1310nm Optical Transmitter ：WOS-WT-1310

- Frequency Range: 47~1218MHz.
- DFB laser, maximum output power 31mW.
- Multi-frequency pre-distortion technique.
- AGC and MGC gain control modes can be switched.
- Two RF inputs with high isolation.
- C/N≥50dB @-1dBm.
- C/CTB≥65dB, C/CSO ≥62dB.

Forward Optical Receiver : WOS-WR-1002

- Support optical AGC, Switchable to MGC.
- Optical AGC Range: -8~+2 dBm.
- Frequency Range:45 ~1003MHz.
- Max Output Level ⩾ 104dBμV.
- C/N⩾ 51dB @-1dBm.
- C/CTB⩾ 67dB, C/CSO⩾ 62dB.

Reverse Optical Receiver : WOS-WR-2004

- 5-204/300MHz, supports Docsis 3.1 standard.
- Optical input Range: +1~ -21dBm.
- Support optical AGC, Switchable to MGC.
- Optical AGC Range: 0 ~ -10dBm.
- Maximum output level: 110dBμV .
- Four independent output.
- Channel Isolation⩾ 65dB.
- NPR Dynamic Range ⩾ 15dB, (NPR⩾ 30dB).

Optical Switch : WOS-WS-1524J

- Automatic switch or manual forced switch.
- Optical Operating Wavelength: 1200~1600nm.
- Optical Input Power Range: -15~+24dBm.
- Max Switching Time⩽ 500ms.
- MTBF >10 million times.
- Insertion Loss⩽ 1.3dB.

RF Switch : WOS-WS-1000RF

- Automatic switch or manual forced switch.
- Frequency Range: 5~1003MHz.
- Channel Isolation⩾70dB.
- Insertion Loss⩽ 2dB .
- Max Switching Time⩽ 15ms.

RF Amplifier : WOS-WA-1200-RP

- Frequency Range: 45~1003MHz.
- Gain adjustment range: 0~ 15dB,1dB stepping.
- EQ adjustment range: 0~ 15dB,1dB stepping.
- Rated Gain ≥20dB .
- Noise Figure ≤ 10dB.
- C/CTB≥ 70dB, C/CSO≥70dB.

Reverse Transmitter : WOS-WTR-1310

- 5~ 300MHz, support DOCSIS 3.1 system.
- Adopt DFB laser, Output Power 1 mW~ 4 mW.
- CWDM standard wavelength.
- NPR Dynamic Range⩾10dB, (NPR⩾30dB).
- Internal temperature detection and monitoring.

1550nm External Modulated **Optical** Transmitter: **WT-1550-EM**

WT-1550-EM external modulated optical transmitter adopts main brand external modulated laser and external modulator, Prevail patent pre-distortion circuit and SBS control circuit. Overall indexes reach to well-known brand types level, but the price is more competitive.We have sold thousands of products over the years. The products save plenty of costs for operator's network construction and get much good reputation from the users.

Feature

- Classical DFB laser and JDSU LiNbO3 external modulator.
- Dual micro-wave source, SBS threshold +13~+19dBm continuously adjustable.
- Standard configuration of Ethernet network management responder,supporting WEB and SNMP network management.
- 19 "1U standard rack, front panel LCD screen display.
- Modular hot backup dual power supply, suitable for AC 100-250V ultra wide range.

Specifications

- Operating Frequency: 47~1003MHz.
- Output Optical Wavelength: 1545-1560nm.
- Input Level Range: 78~96dBμV.
- AGC Control Range:+/-3dB.
- MGC Adjustment Range: 0-15dB.
- C/N: ≥ 52dB ; C/CTB: ≥ 65dB ; C/CSO: ≥ 65dB.
- Power Consumption: <60W.
- Operating Temperature: -5 ℃~+45℃.
- Power Supply: AC100V~250V or DC36V~72V.
- Dimensions: 483mm (L) X 455mm (W) X 44mm (H).

1550nm Directly Modulated Optical Transmitter: WT-1550-DM

WT-1550-DM intelligent direct modulation optical transmitter is mainly used in 1550nm fiber optical transmission systems, adopting advanced electrical dispersion compensation technology. It can accurately compensate in steps of 1km based on the actual transmission distance, with a maximum compensation distance of 50km.

Feature

- High performance DFB laser with ITU standard wavelength output optional.
- The maximum operating frequency up to 1.2GHz, supporting the DOCSIS 3.1 system.
- Can be built-in WDM wavelength division multiplexer and VOA electrically adjustable optical attenuatoar.
- Standard Ethernet network management responder, supporting WEB and SNMP network management.
- 19 "1U standard rack, front panel LCD screen display.
- Standard modular hot backup dual power supply.

Specifications

- Output Optical Power: 10mW.
- Operating Frequency: 47-1218MHz.
- Input level: 75~85dBμV.
- AGC Control Range: +/-5dB.
- MGC Adjustment Range: 0-20dB.
- Dispersion Compensation Distance: 50km.
- CNR : ≥ 48dB ; C/CTB : ≥ 63dB ; C/CSO: ≥58dB.
- Power Consumption: <30W.
- Working temperature: 0℃~+45℃.
- Working voltage: AC100V~250V or DC 36V~72V.
- Dimensions: 483mm (L) X 395mm (W) X 44mm (H)

Note 1: The testing conditions for link indicators are: The measured optical transmitter + 25km standard fiber + standard optical receiver, and the receiving optical power of the optical receiver is -1dBm.
Note 2: For more detailed product introduction and indicator parameters, please refer to the product manual.

1550nm High-power Optical Fiber Amplifier: WE-1550-YZ

WE-1550-YZ optical fiber amplifier uses well-known brands of high-performance Er-Yb co-doped double clad fibers and low noise pump lasers. It has reliable circuit design and efficient heat dissipation design.The maximum total output power can reach +38dBm. YZB type can support up to 64 outputs, with optional optical switches, CWDM, RF detection, suitable for the transmission of CATV RF signals and IP signals in FTTH networks

- Adopting Er-Yb co-doped double clad fiber technology and low noise pump laser.
- 8, 16, 32, and 64 output ports are optional.
- Optional optical switch, CWDM, RF detection.
- Low noise figure: less than 6dB at 0dBm input.
- Standard Ethernet responder, supporting WEB and SNMP network management.
- Real time monitoring of operating parameters such as optical power and pump parameters.
- Standard modular hot backup dual power supply.

Specifications

- Input Optical Power Range: -5 dBm~+10 dBm.
- Input Optical Wavelength Range: 1545nm~1565nm.
- Noise Figure: <6dB.
- Total Output Power:+25dBm~+38dBm.
- C/N : ≥ 50dB; C/CTB : ≥ 63dB ; C/CSO : ≥ 63dB.
- Operating Temperature: -10 ℃~+42℃.
- Power Supply: AC160V~250V or DC-48V.

Outdoor 1550nm High-power Optical Fiber Amplifier: WE-1550-YZ-YW

On the basis of WE-1550-YZ optical fiber amplifier, an outdoor type waterproof casing is adopted to meet the needs of outdoor use.

Feature

- Adopt Er-Yb co-doped double clad fiber technology and low noise pump laser output.
- 4, 8, and 16 output ports optional, CWDM optional.
- Low noise figure: less than 6dB at 0 dBm input.
- Standard Ethernet responder, supporting SNMP network management.
- Real time monitoring of operating parameters such as optical power and pump parameters.

Specifications

- Input Optical Power Range: -5 dBm~+10 dBm.
- Input Optical Wavelength Range: 1545nm~1565nm.
- Noise Figure: < 5.5 dB.
- Total Output Power: +25 dBm~+33 dBm.
- C/N : ≥ 50dB ; C/CTB : ≥ 63dB ; C/CSO : ≥ 63 dB .
- Power Consumption: ≤70W.
- Operating Temperature: -30℃~+55℃.
- Operating Voltage: AC90V~265V (50/60 Hz).
- Dimensions: 460mm: (L)X 270mm(W)X 170mm(H).

Note 1: The testing conditions for link indicators are carried out in accordance with the "GY/T 184-2002 Technical Requirements and Measurement Methods of Analog Optic Fiber Amplifier in CATV Systems"

Note 2: For more detailed product introduction and indicator parameters, please refer to the product manual.

Outdoor 1550nm High-power Optical Amplifier: WE-1550-HT

WE-1550-HT series optical fiber amplifers adopt well-known high-performance Er-Yb co-doped double-clad fiber technology and low noise pumping laser, which have reliable circuit design and high-efficiency dissipation design. The maximum total output power is up to +38dBm and support 64 output ports at most. Operating temperature range is -30 to +65℃, which is applied to harsh outdoor environment. The product can be equipped with optical switch, CWDM, RF detection (optional), which is used for FTTH network transmission of CATV RF signal and IP signal.

Feature

- Adopt Er-Yb co-doped double-clad fiber technology and low noise pump laser.
- 8,16,32,64 output ports selectable. Optical switch, CWDM, RF detection optional.
- Can be set constant power mode or constant current mode.
- Support fan alarm function and fan field replacement.
- Low noise figure.
- Support Ethernet transponder. Support WEB and SNMP network management.
- Network management can support HTTPS, SNMPV3.
- Hot backup dual power modules.

Specifications

- Input Optical Range: -5 dBm ~ +10 dBm.
- Optical Wavelength: 1545nm~1565nm.
- Noise Figure: ≤5.5dB.
- Total Output Power: +25dBm ~ +35dBm.
- C/N: ≥ 50dB, C/CTB: ≥ 63dB, C/CSO: ≥ 63dB.
- Operating Temperature: -30℃~+65℃
- Operating Voltage: AC 100V ~ 240V or DC48V.

Note 1: The testing conditions for link indicators are carried out in accordance with the "GY/T 184-2002 Technical Requirements and Measurement Methods of Analog Optic Fiber Amplifier in CATV Systems"

Note 2: For more detailed product introduction and indicator parameters, please refer to the product manual.

1310nm Optical Transmitter: WT-1310

WT-1310 optical transmitter supports 1.2 GHz band and the DOCSIS 3.1 standard. The output optical power is from +6 dBm to +15 dBm available. It can be used for optical fiber transmission of downstream analog TV signals, digital television signals and CMTS data signals in HFC network. Two-way input signals with high-isolation are satisfied for a variety of broadcast and inter-cut applications. It has patented pre-distortion circuit, high CNR and low distortion.

Feature

- High performance DFB laser with good linearity and high output power.
- 1.2GHz frequency band, supporting DOCSIS 3.1 system.
- High isolation between two RF inputs, achieving high-quality RF inter-cut.
- Multi frequency pre-distortion technology, RF drive total power adaptive.
- 19 "1U standard rack, modular hot swappable dual power supply.
- Output optical power: 4mW~31mW.

Specifications

- Output Optical Wavelength: 1310±20nm.
- Output Optical Power: 4~31mW.
- Nominal Input Level: 75~85dBμV.
- AGC Range:+/-5dB.
- C/N : ≥ 52dB; C/CTB: ≥ 65dB; C/CSO: ≥ 62dB.
- Operating Voltage: AC150V~265V or DC-48V (indoor type).
- Dimensions: 483mm (L) X 395mm (W) X 44mm (H).

Other rack mounted products include as below:

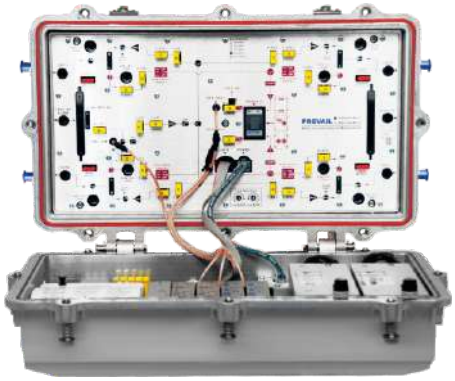
Indoor optical receiver	Return optical receiver	Optical switch	RF switch	RF pre-amplifier
WR-1002-RJL	WR-2004-J	WS-1524J	WS-1000RF	WA-1200-RP

Optical Node: WR-1004N-MLD-GD

WR-1004N-MLD-GD outdoor optical node is a four-way independent output and high level optical node, which applies to 1GHz CATV bidirectional HFC network, optional RFOG burst mode return path components. It can be equipped with 2 forward path optical receiving modules, 2 return path optical transmitting modules, 1 Ethernet transponder module and 2 power modules at most.

Feature

- Support optical AGC, LED screen status display.
- Plug-in type attenuator and equalizer; four-way GaAs power-doubler amplify output.
- RFOG burst mode is optional in the return path.
- Reserved external C-CMTS RF signal interface.
- Modular cast aluminum waterproof shell. Support Ethernet transponder.



Specifications

- 1GHz operating frequency, multi-frequency division optional.
- Optical AGC Range: -8/-7/-6/-5 ~ +2dBm (adjustable).
- Max Output Level: ≥112dBμV.
- C/N: ≥51dB @-1dBm, C/CTB: ≥65dB, C/CSO: ≥60dB .
- Upstream Optical Output: 1310±10nm, 1 mW.
- Upstream RF Input Range: 75 ~ 85dBμV.
- NPR Dynamic Range: ≥15 dB(DFB), NPR≥ 30dB.
- Power Consumption: ≤ 42W.
- Operating Voltage: AC 135V ~ 250V or AC 35V ~ 90V .
- Dimension: 460mm(L) X 282mm(W) X 175mm(H).

Outdoor Bidirectional Optical Receiver: WR-1002-JL-ED

WR-1002-JL-ED series are ultra-thin modular bidirectional optical receivers that can provide two-way high level output. It is suitable for 1.2GHz CATV network. With the thickness of only75mm, it can be vertically or horizontally mounted on wall or hanged.

Feature

- Maximum operating frequency: 1.2GHz; Support DOCSIS 3.1 system.
- Intelligent optical AGC, GaAs power double output.
- Electrical attenuator and equalizer, digital tube display, support Ethernet transponder.
- The forward path optical receiving components and the return path optical transmitting components both adopt independent modular design.
- The upstream channel can be equipped with RFOG burst mode return path components (optional).
- Two-way splitter or tap output, ultra-thin modular cast aluminum waterproof housing.

Specifications

- 1.2GHz frequency, multi-frequency division optional.
- Optical AGC control range: +2~ -9dBm.
- Maximum Output Level: ≥114dBμV.
- C/N ≥51dB C/CTB ≥ 65dB, C/CSO ≥ 60dB.
- Upstream Optical Wavelength：1310±10nm, 1 mW.
- Upstream RF Input Range: 75~85dBμV.
- NPR Dynamic Range: ≥15dB(DFB),NPR≥ 30 dB.
- Power Consumption: ≤ 30W.
- Operating Temperature: -40°C~ +60°C.
- Operating Voltage: AC 135V~250V or AC 35V~90V.
- Dimension: 290mm(L)X 265mm(W)X 75mm(H).

FTTB Optical Receiver: WR-1201-JKCH-TD

WR-1201-JK-TD series are bidirectional optical receivers supporting RFOG mode. The upstream output optical wavelength can be set as CWDM standard to realize OBI Free effectively.

Feature

- Frequency range:5~85/110~1218MHz; support smooth update on the spot (5~204/258~1218MHz).
- Support optical AGC, whose control range is 0 ~ -5/-6/-7/-8dBm adjustable.
- Electrical variable attenuator and equalizer, digital tube display.
- Support DOCSIS 3.1 system and OBI Free.

Specifications

- 5 ~1218MHz,Frequency division optional.
- Optical AGC Control Range: -5/-6/-7/-8dBm ~ 0 (adjustable).
- Max Output Levels 108dBμV.
- C/ N: ≥ 44dBμV@-1dBm; C/CTB: ≥ 60dBμV; C/CSO: ≥ 60dBμV.
- Upstream Optical Wavelength: CWDM standard wavelength in 1470 ~ 1620 nm.
- Power Consumption: ≤ 18W .
- Operating Voltage: AC (150 ~265)V.
- Dimension: 200mm(L)X 175mm(W)X60 mm(H).

FTTB Optical Receiver: WR-1001-J

WR-1001-J optical receiver is a building optical receiver with high output and low power consumption. It is mainly used for CATV FTTB network.

Feature

- Intelligent optical AGC, full-GaAs MMIC amplification device.
- Electrical variable attenuator and equalizer, digital tube display, support Ethernet transponder.
- Built-in optical filter or CWDM (Wavelength Division Multiplexer) optional, satisfy with the "single-fiber, triple-wave" networking mode.
- Can select dual-input backup optical receiver type.

Specifications

- Frequency:45 ~ 862/1003MHz.
- Optical AGC Control Range: -9/-8/-7~+2 dBm .
- Max Output Level:≥ 112dBμV .
- C/N: ≥ 51dB@-1dBm, C/CTB: ≥ 60dB, C/CSO: ≥ 60dB.
- Electrical regulation attenuation 0-15dB, electrical regulation equalization 0-15dB.
- Overall power consumption: ≤ 8W.
- Operating Temperature: -40°C~ +60°C.
- Operating Voltage: AC 150~ 265V (50Hz).
- Dimension: 190mm(L)X 110mm(W)X 52mm(H).

FTTH Optical Receiver: WR-1082NH

WR-1082NH is a FTTH optical receiver. Plastic housing, metal shielding frame for internal RF circuit, compact structure.

Feature

- Frequency range 45MHz ~1.2GHz.
- Input optical power range -18 ~ 0 dBm.
- Optical AGC range -15 ~ -5 dBm.
- Power consumption is only 2W.
- SC/LC - APC/UPC interface(optional).
- Power adapter optional +5V or +12V.
- Dimension: 95mm×60mm×25mm.

FTTH Optical Receiver WR-1082NH-WD

WR-1082NH-WD is a FTTH optical receiver. Plastic housing, indoor optical receiver with WDM, reasonable design, compact structure.
10GPON wavelength WDM is optional.

Feature

- Frequency range 45MHz ~1.2GHz.
- Input optical power range -18 ~ 0 dBm.
- Optical AGC range -15 ~ -5 dBm.
- Power consumption is only 3W.
- SC/LC - APC/UPC interface(optional).
- Power adapter optional +5V or +12V.
- Built-in CWDM, optional G/E PON or 10G/E PON.
- Dimension : 95mm×60mm×25mm.

03

Digital CATV Front-end Equipment

DTV/IPTV All-in-One Service Platform : D-Master 8000/8000A

D-Master 8000 is a highly integrated digital front-end integrated platform that can provide six 0.5U module positions. Users can flexibly choose different functional modules for combination configuration according to their actual needs; The D-Master 8000A is a dual power integrated platform. At present, our company provides five sub board series: Reuse sub board series, Coding sub board series, Gateway sub board series, Modulation sub board series, Tuner receiving (including large card) series. This platform has high integration, reliability, flexibility, and low system operating costs, and can be widely used in digital television broadcasting systems (including terrestrial, satellite, cable, etc.), IPTV, or streaming media service systems.

Feature

- This platform supports ASI and IP input/output.
- Supports dual power supplies and power hot swapping.
- The main control board can configure the active/standby switching of modules (manual/automatic).
- Supports 1 to 6 modules hot swapping.
- Gigabit Ethernet port input/output (supported by both the main control board and sub board, supporting unicast and multicast).
- IP compatibility protocols: IPV4/IPV6, UDP, ARP, RTP, RTSP.

Number	Picture	Model	Function
1		8000/8000A	Integrated platform/dual power supply integrated platform.
2		E-HD-0411-00-01	4ch HDMI high-definition MPEG2/H.264 encoding sub-board.
3		E-HD-0412-00-01	4ch SDI high-definition MPEG2/H.264 encoding sub-board.
4		E-UHD-0111	Single channel 4K ultra high-definition H.265 encoding sub-board.
5		E-HT-0200-00-01 E-HT-0100-00-01	2ch AVS +high-definition transcoding sub-board Single channel AVS + high-definition transcoding sub-board
6		T-FT-0403-00-01 T-FT-0403-00-02 T-FT-0403-00-03	4ch DVB-C/T/T2/S/S2 Tuner sub-board (Can customize Tuner combinations)
7		T-CT-0203-00-01 T-CT-0203-00-02	2ch DVB-C/T/T2/S/S2 CAM sub-board (large card descrambling).
8		M-XC-0101-16-01	16 frequency IPQAM multiplexing scrambling modulation sub-board.

D-Master 9000 Series IPQAM

D-Master 9000 series IPQAM modulator support GbE electrical port/optical port. Support any non-adjacent frequency output, also support the multiplexing / scrambling output, and fully meet the needs of broadcast or video-on-demand business.

D-Master 9016B-DPS is a dual power IPQAM with technical parameters similar to the D-Master 9016B.
D-Master 9801 monitoring type IPQAM modulator (RTSP to DVB-C IPQAM): This device, combined with the monitoring system, realizes the modulation of real-time streams commonly used in the monitoring industry (H.264 format data streams encapsulated in RTSP) into DVB-C radio frequency signals. All users in the community can directly view the real-time situation of each monitoring point in the community through CATV signals. A single device (single frequency point) supports 1-8 channels of high-definition/standard definition H.264 monitoring signals. It is compact to install and extremely convenient to carry, and is ideal for use in communities, hotels, restaurants, supermarkets, and other places.
D-Master9004B portable 4-frequency IPQAM modulator. This device supports IP input, multiplexing function, and four adjacent frequency modulation outputs. RF supports multiple modulation outputs ranging from 64 to 256QAM. By connecting to the network management through the Ethernet LAN port, users can view the device status and complete related operations of QAM modulation function.
The operation is convenient and the human-machine interface is friendly.

Feature

- Support 1000base-T/GbE SFP input.
- Max symbol Rate 7Mbps, Effective output bit rate: 51.6 Mbps (SR=7Mbaud, 256QAM).
- Support 16-256QAM, output frequency and level continuously adjustable.
- Support PSI/SI edit, PID re-mapping, PID by pass.
- 1,16~96 RF output per unit.
- Support IP based multiplexing/scrambling (D-Master 90xx series only).
- Support WEB configuration operation and condition monitoring.
- Provide indoor and outdoor types.

Specifications

- Output Frequency: 48~863MHz.
- IP Input Type: 1000Base-T/ GbE SFP.
- Output level: ≥100 dBμV.
- IP Max. Bitrate: 1.25 Gbps.

General Features

- Operating Temperature: 0 ~ +50℃
- Power Consumption: ≤55W.
- Supply Voltage: AC220±5 %(50Mz) or AC 110V±5 %(60Hz).
- Mechanical Dimension:
  483mm (L)X 400mm (W) X 44mm (H) (9016B type)
  107mm (L) X171mm (W) X 53mm (H) (9801 indoor type)
  237mm (L) X 177mm (W) X 115mm (H) (9801 outdoor type)

Number	Picture	Model	Function
1		D-Master 9016B	Edge IPQAM.
2		D-Master 9016B-DPS	Dual power supply IPQAM.
3		D-Master 9801	Monitoring type IPQAM modulator (indoor/outdoor type).

WDE Encoder/Transcoder Series (support IP output)

The WDE series encoding and transcoding devices can achieve high-quality video and audio signal encoding and transmission under low bitrate conditions, supporting multiple input/output interfaces; There are nine products: WDE-4220C, WDE-4420C, WDE-8420B, WDE-H230, WDE-H430, WDE-H220, WDE-H420B, WDE-H820B, WDE-H130. They can meet the needs of MPEG-2, MPEG-4/H.264, HD/SD, encoding / transcoding various functional requirements, and be widely used in digital TV head-end system or in IPTV system for signal source collection.

Feature

- High-fidelity audio processing technology, support stereo output.
- Support MPTS and SPTS over IP, support PSI/SI edit.
- SPTS mode: up to 8 or 32 channels.
- Adjustable rate output, operation flexibility.
- Supports one ASI input, multiplexing output with encoded programs or transcoding output.

WDE-H130 Portable Mini HD Encoder with IP/ASI output

(Encoder/Transcoder series] :

- Support HD/SD MPEG2 and MPEG4/H.264 AVC encoding and transcoding. ASI devices support ASI input to multiplexing or transcoding,
- Web network management,in SPTS mode，you can select IP module which with 8 or 32 channels.
- WDE-H130 is a portable high-definition encoder with the characteristics of small size, stable operation, and convenient portability.

Encoder Product Line Information Table:

Model	Descriptions												
	N*1	HD	SD	MPEG-2	H.265	H.264	CVBS	HDMI	SDI	PbPrY	ASI IN	IP OUT	ASI OUT
WDE-H130	1	√		√		√		√	√			√	√
WDE-H220	1	√				√	√	√	√	√		√	√
WDE-H230	1	√		√		√	√	√	√	√	√	√	√
WDE-H420B	4	√		√		√		√	√			√	√
WDE-H430	4	√		√		√		√	√		√	√	√
WDE-H820B	8	√		√		√		√			√	√	√
WDE-4220C	1		√	√		√	√		√	√	√	√	√
WDE-4420C	4		√	√		√	√				√	√	√
WDE-8420B	8		√	√		√	√				√	√	√

TS Receiver Series: WDT-1200

WDT-1200 TS receiver series using TS receive and demodulation/decoding/descrambling, Compatible with DVB-C/DVB-S/S2/ DVB-T/T2. TS receiver series including: WDT-1208, WDT-1208D, WDT-1200D, WDT-1200H. They can be widely used in the building up of digital TV head-end system or in IPTV system for signal source collection.

Feature

- Support DVB full series signal demodulation.
- Support ASI, SPTS/MPTS over IP output.
- Support HDMI, CVBS, and SDI etc output port.
- Support MPEG-2/4/H.264 AVC, SD or HD decoding.
- With CI module, it can receive the encrypted programs.

Receiver Product Line Information Table:

Model	Descriptions											
	Tuner NO.	CI NO.	DVB-C	DVB-S/S2	DVB-T/T2	ASI IN	IP IN	SDI OUT	AV OUT	HDMI OUT	IP OUT	ASI OUT
WDT-1208	6		✓	✓	✓	✓					✓	✓
WDT-1208D	8		✓	✓	✓	✓					✓	✓
WDT-1200D	1	2	✓	✓		✓	✓	✓	✓		✓	✓
WDT-1200H	2	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

WDQ Modulator Series

WDQ modulator series can complete the program multiplexing, PSI / SI editing and management functions, PID mapping and bypass and other functions. Model: WDQ-3200B, WDQ-3204B, WDQ-3244,etc .

Feature

- TS packet format input automatic detection and output configurable (188 or 204 bytes), PCR correction.
- PSI/SI tables regeneration, PSI/ SI information synchronal updating possible.
- PID filtering andre-mapping.Automatic and intelligent data filled and empty packet deleted.
- Local keyboard control and LCD display, or access via Ethernet link.

QAM Modulator Product Line Information Table:

Model	Descriptions	Note
WDQ-3200B	Single frequency QAM modulator, 1ch DVB-ASI input, 16-256QAM modulation, output frequency 48-863MHz, symbol rate 5-7Mbaud.	Direct /multiplexing mode.
WDQ-3204B	Single frequency QAM modulator, 4ch DVB-ASI inputs, 16-256QAM modulation, output frequency 48-863MHz, symbol rate 5-7Mbaud.	Direct /multiplexing mode.
WDQ-3244	Four adjacent frequencies QAM modulator, 4ch DVB-ASI inputs, 16-256QAM modulation, output frequency 48-863MHz, symbol rate 5-7Mbaud.	Direct mode.

WDG-5000 series IP Gateway

WDG-5000 series IP gateway is a bidirectional gateway device for digital television ASI to IP gateway and IP to ASI. This product can be widely used for ASI signal transmission based on IP networks, adaptation, and the construction of IPTV systems.
There are three models of products : WDG-5101, WDG-5108, and WDG-5801.

Feature

- The number of ASI input/output channels can be customized, or a single device can support bidirectional conversion.
- Single channel maximum input/output bit rate is 108Mbps, automatic detection of 188 byte or 204 byte packet format.
- Supports SPTS or MPTS input/output, supports unicast or multicast IP transmission methods.
- The maximum latency from DVB-ASI to IP shall not exceed 10ms and shall not be less than the maximum throughput of 900Mbps.
- Support NMS or WEB network management configuration operations and status monitoring.

IP Gateway Product Line Information Table:

Model	Descriptions	Note
WDG-5101	IP bidirectional gateway of ASI to IP or IP to ASI , 1 ASI input, 1 ASI output, Gigabit Ethernet IP output (10/100/1000M rate adaptation).	Supports SPTS (up to 32) or MPTS output.
WDG-5108	IP gateway of IP to ASI, 1 Gigabit Ethernet IP input (10/100/1000M rate adaptive), 8 ASI outputs.	Single ASI channel supports a maximum input/output bit rate of 214Mbps.
WDG-5801	IP gateway of ASI to IP, 8 ASI inputs, 1 Gigabit Ethernet IP output (10/100/1000M rate adaptive).	Supports SPTS (up to 128) or MPTS output.

Digital Media Master (DMM) IPTV Streaming Integrated Platform

DMM IPTV streaming media server for IPTV to provide video streaming services in order to meet the OTT STB and UDP STB market demand.
DMM IPTV streaming media server supports user authorization management, program classification management, etc.
It specializes in dealing with IP program processing, well to meet the various needs of different users.

Feature

- HTTP / RTMP / HLS / UDP / RTP / input/output.
- Support H264/MPEG4 AVC, MPEG2, AAC/MP3.
- Live video streaming / VOD / time-shift system.
- Unicast / Multicast input/output.
- Support HLS MPEG TS output.
- Support RTMP output stream for HTTP/UDP MPEG TS input.
- Support Apple IOS device, Android device, smart TV and PC.
- Channel management / movie management.
- Online user management,group management.
- Traffic statistics, load balancing, concurrent connection limit, and bandwidth limit.
- Stream Protection: Player Filter / IP Blocker / MAC ID Protection / Blacklist Management.
- EGP management and editing.
- System log, ratings statistics, report statistics.
- WEB network configuration operation and status monitoring.

Hardware Requirement (Recommend)

- Internet Access: Public Static IP or Domain Name .
- Processor: Quad-Core (Intel i7 4970) .
- RAM: 16GB .
- Network Interface: 1G BASE .
- Hard Disk Space: 150MB available space for installation.
- The above specification is for 200 channels and 800 concurrent users.

Software Requirement

- Linux : Debian / Ubuntu Server / CentOS / Fedora.

PREVAIL DMM(Digital Media Master)
IPTV Media Stream Platform

- DVB-C/S/S2/T/T2 FTA/CAM
- UHD/HD/HD H.265/H.264 MPEG-2
- RTP/UDP/RTSP/HLS Stream

- DMM SERVER Win/Linux

IP Networks(LAN/WAN)

- Android APK on OTT/ Mobile Phone/Smart TV

DEMO*APK (Android) is open for WAN,you can scan and install the APK anywhere the internet is access.
(* DEMO version shows partly functions only)

VOD	Time shift	Catch-up	EPG	Live TV
Payment	RTSP	SPTS	HTTP(HLS)	Unicast
UDP	Password Protection	Authorization	Multicust	MPTS

04

Optical Passive Accessories

PLC Optical Splitter

PLC optical splitter is one of the most important passive components in the optical fiber link. It is an optical fiber junction device with multiple input ports and multiple output ports. It is especially suitable for connecting the master and slave equipment in the passive optical network (EPON, GPON, BPON, etc.) and realizing optical signal splitting.

PLC-Adaptor-input ABS type Splitter

PLC-LGX box PLC Splitter

PLC-Rack Type PLC Splitter

Feature

- Low insertion loss,low PDL.
- Good channel to channel uniformity.
- Wide operating wavelength from 1260~1650nm.
- Using adaptor as input port.
- Input and output cable: OD2.0mm,good mechanical performance,convenient for connector assembly.

Parameter	1x2	2x2	1x4	2x4	1x8	2x8	1x16	2x16	1x32	2x32	1x64	2x64
Operating wavelength(nm)	1260~1650											
Fiber type	G652D/G657A1/G657A2											
Insertion Loss(dB)	4	4.2	7.2	7.4	10.5	10.8	13.7	14	17	17.5	20.6	21
Uniformity(dB)	0.4	1	0.6	1.5	0.8	1.5	1.2	2	1.5	2	2	2.5
Return Loss(dB)	55		55		55		55		55		55	
PDL(dB)	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.35	0.5
Directivity(dB)	55		55		55		55		55		55	
Temperature Stability (-40~85℃)(dB)	0.5		0.5		0.5		0.5		0.5		0.5	
Operating Temperature(℃)	-25~70											
Storage Temperature(℃)	-25~70											
ABS box dimension (LxWxH)mm	100x80x10		100x80x10		100x80x10		20x80x18		140x115x18		140x115x18	

Notes:Add an additional 0.3dB loss per connector.

WDM Wavelength Division Multiplexer

WDM is a type of communication technique. It combines a series of optical signals carrying information but with different wavelengths into a bundle and transmits them along single optical fiber, then using a certain method to separate optical signals of different wavelengths at the receiving end.

WDM--8ch CWDM/DWDM ABS Module

WDM--CWDM/DWDM/FWDM LGX Module

WDM--19''Rack and GPON Module

Feature

- Low insertion loss.
- Wide pass band.
- High channel isolation.
- High stability and reliability.
- Epoxy free on optical path.

Parameter		4 Channel		8 Channel		16 Channel	
		Mux	Demux	Mux	Demux	Mux	Demux
Channel Wavelength(nm)		1270~1610/1271~1611					
Channel Spacing(nm)		20					
Channel Passband(@-0.5dB bandwidth)(nm)		±7.5/±6.5					
Insertion Loss(dB)		≤1.5		≤2.5		≤3.5	
Channel Uniformity(dB)		≤0.6		≤1.0		≤1.5	
Channel Ripple(dB)		≤0.3					
Isolation(dB)	Adjacent	N/A	>30	N/A	>30	N/A	>30
	Non-adjacent	N/A	>40	N/A	>40	N/A	>40
Insertion Loss Temperature Sensitivity(dB/℃)		<0.005					
Wavelength Temperature Shifting(nm/℃)		<0.002					
Polarization Dependent Loss(dB)		<0.1					
Polarization Mode Dispersion(ps)		<0.1					
Directivity(dB)		>50					
Return Loss(dB)		>45					
Maximum Power Handling(mW)		300					
Operating Temperature(℃)		-5~+75					
Storage Temperature(℃)		-40~+85					
Package Dimension (LxWxH)mm		(L)100x(W)80x(H)10				(L)141x(W)115x(H)18 (L)120x(W)80x(H)18	

Above specification are for device without connector.

Fiber Optical Connectors and Pigtails

Optical fiber connectors, i.e. fiber optic patch cord, are devices that are detachably (actively) connected between optical fibers which will affect the reliability and performance of the optical transmission according to its quality.
We offer optical fiber connectors of various types and performances, such as FC, SC, ST, LC,MU, DIN,E2000,MPO,etc.

SC/APC
[single mode]

SC/UPC-LC/UPC
[single mode]

SC/APC Dual Core
[single mode]

FC/UPC
[single mode]

FC
[multimode]

FC/APC 12 core bundle tail fiber
[single mode]

Types	PC	UPC	APC
Insertion Loss(dB)	<0.20	<0.20	<0.30
Repeatability(dB)	<0.20		
Interchange ability(dB)	<0.20		
Return Loss(dB)	>50[SM]	>55[SM]	>60[SM]
Fiber type	SMF-28TM ,9/125 μm [SM] ; 50/125 μm or 62.5/125μm [MM]		
Operating Temperature(℃)	-40……+80		
Storage Temperature(℃)	-40……+85		
Plug times	≥1000		

SFP Optical Module

There are 25G/100G/200G/400G optical modules of different specifications,which are suitable for different solutions.
They can meet the needs of storage and network devices and can be widely used in high-speed networks and data centers.

WLGH02K-DCL

Feature

- 200 Gigabit Ethernet (212.5 Gbit/s).
- Transmission length of up to 2 km over duplex SMF.
- Compliant to QSFP+ 28Gb/s 4X Pluggable Transceiver Specifications.
- Compliant to QSFP28 4X Hardware and Electrical Specification.
- Optical light source: 4- channel 1310 nm EA-DFB LD.
- Optical receiver: 4-channel PIN photo detector.
- Low power consumption: 6.5 W max.
- Operating case temperature: 0 to 70 deg C.
- Compact size defined by Specification for QSFP+ 4X Module.
- Hot Z-Pluggable to 38-pin electrical connector.
- Latching mechanism: Pull tab.
- Two-wire common management interface.
- RoHS 10 (2011/65/EU + 2015/863) compliant.
- Compliant to 26.5625 GBd PAM4 x 4 lane 200GAUI-4 Electrical Interface specification.
- Compliant to 26.5625 GBd PAM4 x 4 wavelength 200GBASE-FR4 optical interface specification.

WLQH02J-DCL

Feature

- Four-channel full-duplex transceiver modules.
- Transmission data rate up to 26Gbit/s per channel.
- Up to 2km transmission of single mode fiber.
- Low power consumption <3.5W.
- Operating case temperature 0°C to +70°C.
- 3.3V power supply voltage.
- RoHS 6 compliant.
- Hot Pluggable QSFP form factor.
- LC connector receptacle.
- Built-in digital diagnostic function.

WL778(87)2099-DxL

Feature

- Up to 11.1Gbps Data Links.
- Up to 20km transmission on SMF .
- Power dissipation<1.5 W.
- 1270nm DFB laser and PIN receiver for uplink.
- 1330nm DFB laser and PIN receiver for downlink.
- 2-wire interface with integrated Digital Diagnostic monitoring.
- EEPROM with Serial ID Functionality.
- Hot-pluggable SFP+ footprint.
- Compliant with SFP+ MSA with LC connector.
- Single + 3.3V Power Supply .
- Case operating temperature range: 0°C to +70°C or -40 to 85°C.

WL5432043-LxS

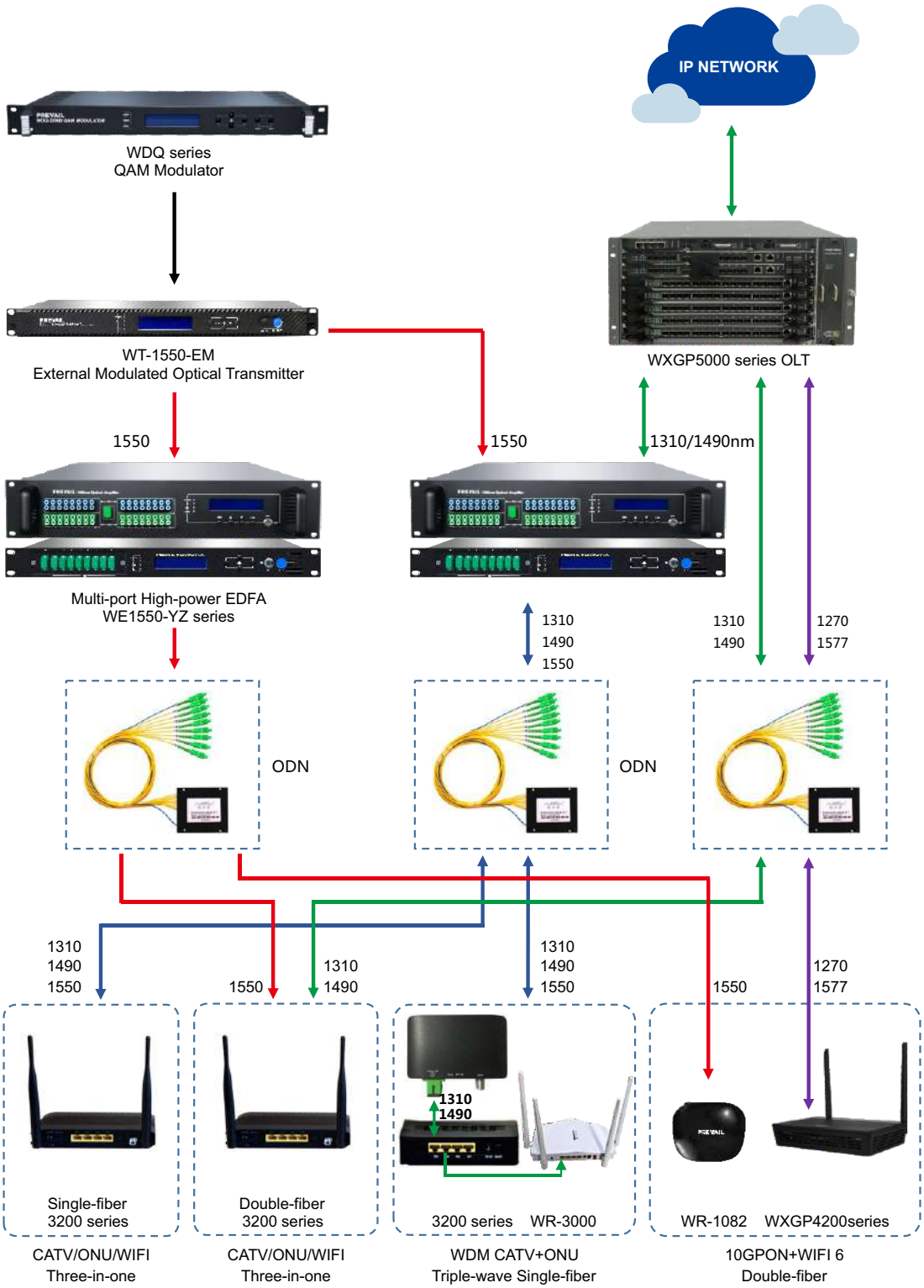
Feature

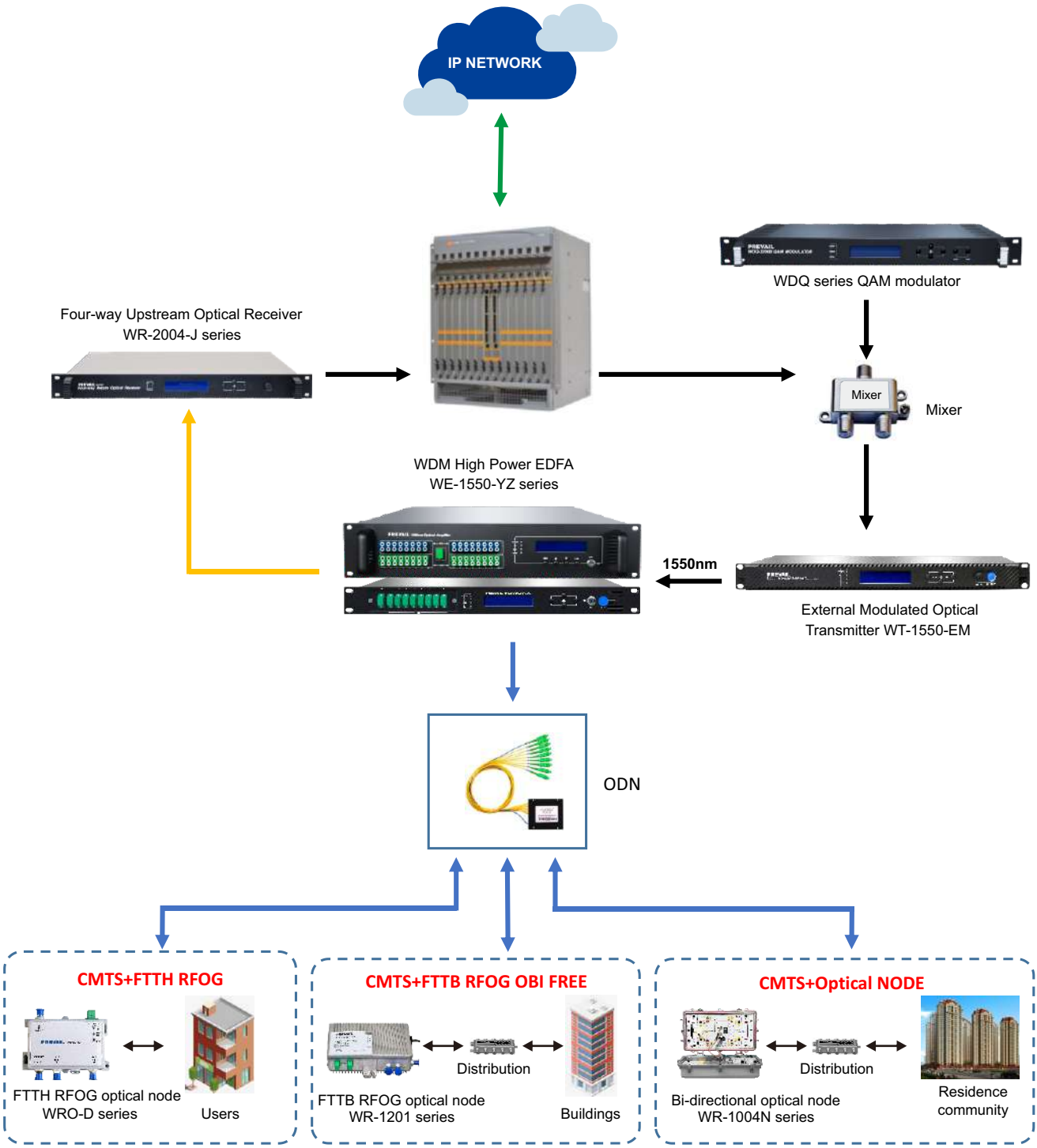
- SFP with SC/PC Connector Transceiver .
- 1490 nm DFB Tx with isolator .
- 1310 nm APD Rx .
- Digital diagnostics SFF-8472 Compliant .
- 2488 Mbps continuous mode Transmission .
- 1244 Mbps Burst mode receiver Data Rate .
- RX Fast Burst Mode Detection .
- Provide fast RSSI function .
- Operation case temperature: 0~70°C or -40~85°C.
- Class C+ link budget .
- Comply with ITU-T G984.2 Amendment 1 .
- Complies with RoHS directive (2002/95/EC).

05

System Application Scheme

1550nm Transmission System CATV+XGPON Solutions




IP NETWORK
WDQ series QAM modulator
Four-way Upstream Optical Receiver
WR-2004-J series
Mixer
Mixer
WDM High Power EDFA
WE-1550-YZ series
1550nm
External Modulated Optical
Transmitter WT-1550-EM
ODN
CMTS+FTTH RFOG
FTTH RFOG optical node
WRO-D series
Users
CMTS+FTTB RFOG OBI FREE
Distribution
FTTB RFOG optical node
WR-1201 series
Buildings
CMTS+Optical NODE
Distribution
Bi-directional optical node
WR-1004N series
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