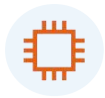


FT512GWD-A20X

ONU+OTT Smart Home Terminal



High Speed CPU



Low Power Consumption



Software Customization



Optional Shell Supply



Brief Views

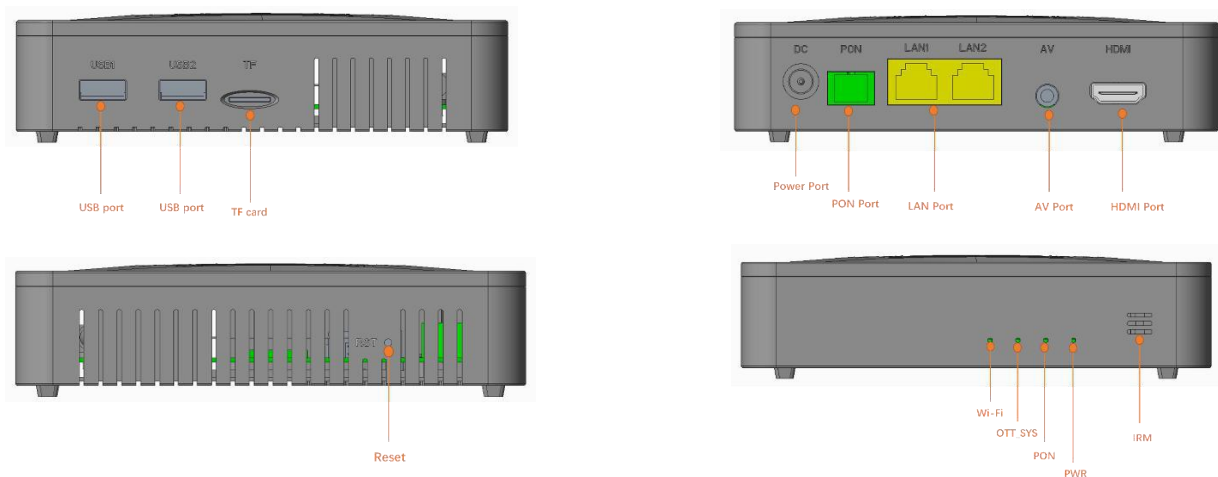
FT512GWD-A20X is a second generation of FTTH type OTT+ONU+Wi-Fi three in one smart terminal developed by C-DATA. The ONU Part supports EPON and GPON two modes access. The ONU automatically switches into the corresponding PON mode by identifying the local OLT mode to complete GPON or EPON adaptive access. The OTT Part adopts Amlogic latest Chipset (S905Y4), ultra low power consumption, high cost performance.

FT512GWD-A20X can support live broadcast, VOD and broadband convergence services in one integrated equipment. It provides a perfect terminal solution and future-oriented service supporting capabilities for FTTH deployment.

Functional Feature

- In compliant with IEEE802.3ah and ITU - T G.984 standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support multicast Snooping/Proxy
- Support DHCP/Static/PPPOE internet mode
- Support port-binding
- Support OAM/OMCI remote management
- Support data encryption and decryption function
- Meet 802.11b/g/n/ac Wi-Fi technical standard
- Support loop-detection function
- Support device-based speed limitation
- Support MAC filter and URL access control
- Support power-off alarm function , easy for link problem detection
- EMS network management based on SNMP , convenient for maintenance
- OTT chipset amlogic S905Y4
- OTT CPU ARM Cortex -A35
- OTT GPU ARM Mali-G31 MP2
- OTT RAM 2G/ROM 16G
- OTT Android 11
- Support AV1 MP-10@L5.1 up to 4Kx2K@60fps
- Support VP9 Profile-2 up to 4Kx2K@60fps
- Support H.265 HEVC MP-10@L5.1 up to 4Kx2K@60fps
- Support AVS2-P2 Profile up to 4Kx2K@60fps
- Support H.264 AVC HP@L5.1 up to 4Kx2K@30fps
- Support MPEG-4 ASP@L5 up to 1080P@60fps
- Support Concurrent multi-core processing
- Supports HDR10+, HDR10, HLG HDR processing
- Support OpenGL ES 3.2, Vulkan 1.1 and OpenCL 2.0
- Support Bluetooth 5.0, OTA update

Product Interface and LED



LED Definitions

Indicator		Description
PWR	Power status	On: The terminal is power on; Off: The terminal is Power off;
PON	ONT Register	On: Success to register to OLT; Blinking: In process of registering to OLT; Off: Failed to register to OLT or no normal optical signal input;
OTT_SYS	OTT status	Red: the standby mode; Blue: the working mode;
Wi-Fi	Wi-Fi status indicator	Blinking: Data is being transmitted On: WIFI function Opens

Hardware

- **GPON/EPON Port**
 - SC/APC single mode single fiber
 - GPON: FSAN G.984.2 standard, Class B+
 - EPON: 1000BASE-PX20+ symmetric
 - GPON: 2.488Gbps/1.244Gbps downstream/upstream
 - EPON: 1.25Gbps downstream/upstream
 - Wavelength :
Transmit: 1310nm Receiver: 1490nm
 - Receiving sensitivity :
GPON: -28dBm EPON: -27dBm
 - Saturated power :
GPON: -8dBm EPON: -3dBm
 - Transmitting power :
GPON: 0.5~5dBm EPON:0~4dBm
- **User Port(LAN)**
 - 2*10/100/1000 Mbps Auto-negotiation RJ45 ports
 - Full Duplex / Half-Duplex
 - RJ45, Auto-MDI/MDI-X
 - Transmission Distance 100 Meter
- **User Port(HDMI)**
 - 1*HDMI Type A
 - Transmission Distance 20 Meter
- **User Port(USB)**
 - 2*USB2.0 Type A HOST
 - Transmission Distance 5 Meter
- **User Port(AV)**
 - 1*3.5mm AV port
- **User Port(TF Card)**
 - Up to 128GB capacity

- **Indicators**
 - PWR / PON / OTT_SYS / Wi-Fi
- **Power**
 - External 12V/1.5A DC power supply adapter
 - Power consumption: <10W
- **Dimension and Weight**
 - Item Dimension:
 - 135mm(L) x135mm(W) x32mm (H)
 - Item weight: about 320g
- **Environmental Specifications**
 - Operating temperature: 0 to 40° C
 - Operating humidity: 10% to 90%(Non-condensing)
- **WIFI performance parameters**
 - IEEE802.11b/g/n/ac(2.4G/5G)
 - Max rate: 1200Mbps(Dual Frequency)
 - Antenna gain: 3dBi
 - Max TX power: 17dBm

Software

- **Management**
 - EPON :OAM / WEB / TR069 / Telnet
 - GPON:OMCI / WEB / TR069 / Telnet
- **Register**
 - Auto-discovery/Link detection/Remote upgrade software
 - Auto/MAC/SN/LOID+Password authentication
- **Switch**
 - MAC address learning
 - MAC address learning account limit
 - Broadcast storm suppression
 - VLAN transparent/tag/translate/trunk
- **Multicast**
 - IGMP V2
 - IGMP VLAN
 - IGMP transparent/Snooping/Proxy
- **Security**
 - Firewall
 - MAC address/URL filter
 - Remote WEB/Telnet access control
- **OTT**
 - Android 11
 - Chromecast,Airplay,Skype chatting,Picasa,Youtube,Flicker,Facebook,Online movies,etc.

Application

- Typical Solution: FTTH
- Typical Business: Internet, IPTV, VOD, Wi-Fi

