CHANGHONG 长虹

Proposal for Overseas Project
GPON ONT

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Part One

1.1 Company Brief Introduction

Changhong Group is an internationalized enterprise group which turnover 15 Billion USD annually and has 13 industries including digital TV, digital panel display, IT, healthy air-conditioner, digital AV, STB, mould, digital device, eco-friendly battery & power, technical equipment, electronic engineering, chemical material. It is a leading consumer electronics supplier, key device supplier, system software developer, broadcasting and TV network facilitator and the integrator of commercial information system.

In 2005, Sichuan Changhong Network Technologies Co., Ltd (abbr: Changhong Network) registered as an independent subsidiary company of Changhong Group, Specialized in R&D, Manufacturing, Sales and Service; Since 2010, started extending business scope, offering head-end, STB, broadband, SW integration and VAS for global broadcasting, telecommunication, internet operators;
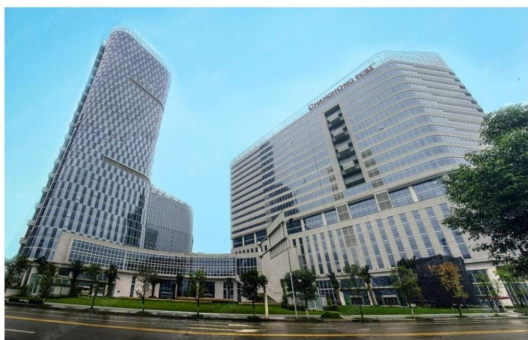

1.2 R&D Brief Introduction

Possessing over 325 experienced engineers dedicated to R&D, quality control and project management, Including 70 senior engineers. Our team are experienced in hardware design, hardware performance test, platform design, loader design, CAS/DRM design, application design on DVB, IPTV/OTT, WIFI, Cable Modem, and ONU products. There are Mianyang R&D center, Chengdu R&D center, Shenzhen R&D center, and India R&D center in the team, Changhong Network has been cooperating tightly with world's leading chipset, CA and middleware companies to provide competitive products to customers worldwide.

Our company has introduced multiple sets of testing equipment, which are advanced in the world and take the lead in the industry, such as Rohde & Schwarz, Tektronix, Keysight, Litepoint, Spirent and IXIA. Established on the basis of ISO/IEC 17025 quality system, is through the China certification of conformity assessment (CNAS) national approval committee of laboratory. We established the National Broadcasting Network Center CHANGHONG laboratory with the State Administration of Press Publication, Radio, Film and Television, and established CHANGHONG Network & MORLAB joint laboratory with MORLAB group. The test center has 20 professionals who have rich detection experience and are familiar with international and domestic standards and measurement methods. The director of the Test Center is a member of Digital TV

Standard Technology Expert Group, who has successively participated in the formulation of national and industrial standards related to digital television and access network products (has participated in the formulation of more than 30 standards). The Test Center carries out the work in Mianyang, Chengdu and Shenzhen at the same time.

1.3 Production Brief Introduction

Changhong Network owns 40 SMT and 15 final assembly lines, and has its own professional molding and injection machines, EMC lab and testing center. Under the completed production system, the production capacity reaches 20 million annually.

1.4 Marketing Brief Introduction

Besides achievement made in China, Changhong Network has a consecutive 40% growth in last three years, and its products have been exported to Europe, Africa, South America, CIS, Asia, etc.

1.5 Services Brief Introduction

Changhong network is a customer-oriented corporation, aiming to maintain the leading position in supplying high-qualified, full-featured, innovative and cost-effective products and best services in global digital TV market.

Part Two

2.1 Hardware Specifications

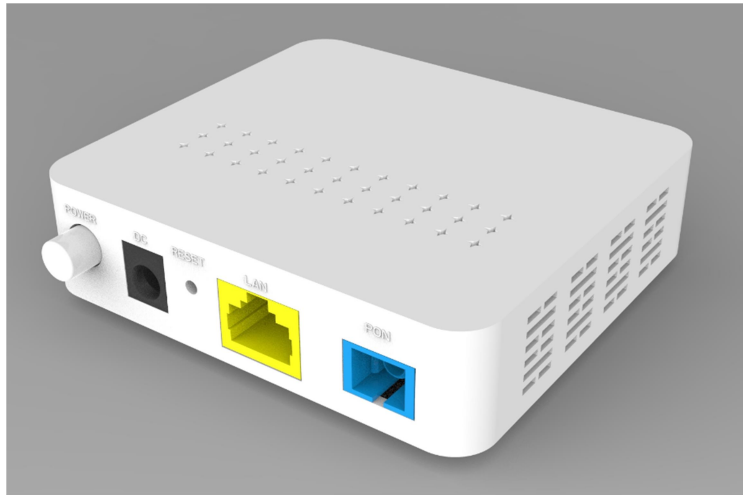| Items	Description		Comments
Main Chipset	ZX279125		
CPU	Single Core 600MHz		
DDR	Built-in 32MB		
FLASH	8MB		
WiFi	None		
Interface (Front Panel)	LED Display	4* red/green LED	
	Others	None	
Interface (Rear Panel)	Ethernet Port	1* 10/100/1000 Mbps	
	RJ11 Port	None	
	USB	None	
	Power Switch	1	
	Reset	1	
	WPS	None	
	Antenna	None	
	Others	None	
Interface (Side Panel)	LED Switch	0	
	Others	None	
Power Adaptor	AC IN	100 ~ 240V AC	
	DC OUT	12V, 1A	
	Operation Temperature	0~40 ℃	
Cabinet	Cabinet Materials	Normal ABS	
	Cabinet Size	88mm(L)×80mm(W)×25mm(H)	
Packaging	Normal Packaging		
Accessories	Power Adaptor	1	
	Ethernet Cable	1	
	User Manual	1	
	Others	None	
Operating Temperature	0-50 degrees Celsius; should meet customer requirement		
Humidity Parameters	<95%; should meet customer requirement		

2.2 Software Features

Items	Description	Comments
GPON Basic	Support ITU-T G.984.1/2/3/4 Support 8 Tcont,128 Gemport Support FEC (Forward Error Correction) downstream and upstream Support SBA/DBA Support Dying-gasp	
Management	WEB /TR069/TELNET/CLI	
DHCP	Support DHCP Server Support DHCP Relay	
VLAN	Support VLAN tag mode Support VLAN transparent mode Support VLAN trunk mode	

Items	Description	Comments
	Support VLAN translation mode	
	Support VLAN QinQ mode	
Multicast	Support IGMPv1/v2/v3	
	Support IGMP Proxy and MLD Proxy	
	Support IGMP Snooping and MLD Snooping	
QOS	Support 8 queues	
	Support SP and WRR	
	Support 802.1P	
	Support DSCP	
Security	Support Firewall	
	Support Mac filter	
	Support ACL	
	Support URL filter	
L3	Support IPv4、IPv6 and IPv4/IPv6 dual stack,DS-Lite	
	Support DHCP/PPPOE/Statics	
	Support Static route	
	Support NAT	
	Support Bridge, Route ,Route and Bridge mixed mode	
	Support DMZ	
	Support DNS	
	Support ALG	
	Support UPnP	
Other	Support image backup	

2.3 Outlook/Housing

Note: Plastic

2.4 Power Adaptor

Note: Standard should meet customer requirement; 12V, 1A

2.5 Accessories

PSU*1
Manul*1