

**BDCOM S8500 GEPON/10GEPON Series OLT:**

Technical parameters

Item	Attributes	Specification		
		S8503	S8506	S8510
<b>Main interface</b>	Expanded slot	One slot for the control panel and two slots for service modules	Two slots for the control panel and four slots for service modules	Two slots for the control panel and eight slots for service modules
	Backplane bandwidth	1.2T	2.4T	3.2T
	Exchange capacity	384Gbps	1.5Tbps	2.3T
	Packet's forwarding rate	238Mpps	476 Mpps	952 Mpps
	Maximum number of 10-gigabit ports	16	32	64
	Maximum number of gigabit ports	96	192	384
	Maximum number of 100M ports	96	192	384
	Maximum number of EPON ports	32	64	128
	Maximum number of 10GEPON ports	16	32	64
<b>Hardware parameters</b>	CPU	RISC CPU (RISC 800MHz)		
	Flash	16MB		
	Memory	A necessary 512MB memory, which can be expanded to 2GB		
	MAC table	512K	512K	512K
	VLAN table	4K	4K	4K
	IP routing table	512K	512K	512K
<b>EPON attributes</b>	IEEE 802.3ah EPON standard, IEEE802.3av 10GEPON standard			
	Complying with Chinese Telecom EPON interconnection standards and interconnecting ONU which is made by main communication factories			

	China Telecom EPON standards--CTC2.1/3.0	
	Standard OAM and expanded OAM management	
	Supporting uplink/downlink encryption	
	Simultaneous registration of up to 64 ONUs	
	Upgrading single or multiple ONUs	
	Supporting DBA	
	Supporting the ONU authentication and the report of illegal ONU registration events	
	Supporting backbone optical-fiber protection, "1+1" hand-in-hand protection, full protection, switchover delay of less than 50ms	
<b>Software functions</b>	Supported network standard	IEEE 802.1D IEEE 802.3 IEEE 802.3u IEEE802.3ad IEEE 802.3x IEEE 802.3z IEEE802.1Q IEEE 802.1P IEEE 802.1w IEEE 802.1x
	STP	802.1D (STP), 802.1w (RSTP), 802.1s(MSTP)
	Routing protocol	STATIC, RIPv1/2, OSPF, BGP
	MPLS	MPLS, MPLS VPN, MPLS TE
	Ipv6	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL, NAT-PT, IPv6 tunnel, 6PE, Ipv6 static route, RIPng, OSPFv3, BGP4+
	Multicast protocols	IGMP, IGMP Snooping, IGMP Proxy, DVMRP, PIM-SM, PIM-DM, MSDP, MOSPF, MBGP
	QoS	Having 8 queues for each port and supporting 802.1p, ToS, port ID, DifferSev, WRR, SP, SWRR, flow shaping, VLAN-ACL-based flow classification
	ACL	Supporting standard ACL and extended ACL, IP ACL, and data filtration based on source/destination IP, layer-3 IP ID, layer-4 TCP/UDP ID, IP priority, ToS or time range
	MAC operations	Supporting port/MAC bind, and MAC filter
	VLAN type	Supporting GVRP, PVLAN and VLAN Stacking (QinQ)
	Flow control	Supporting HOL block prevention, half-duplex backpressure and full-duplex IEEE 802.3x
	ARP	Support
	DHCP	Supporting Client, Relay and Server
	Port aggregation	Supporting 802.3ad and load balance
	User's access	Supporting 802.1x
	AAA authentication	Supporting RADIUS and TACACS+
	Port mirror	Support
Broadcast Storm Control	Support	

	Security	Supporting active/standby switchover, hot swap, HSRP and VRRP
<b>Network management</b>	Console interface	CLI, WEB
	Console	RS-232
	Telnet	Support
	SNMP	v1, v2, v3
	SysLog	Support
	RMON	Group 1, group 2, group 3 and group 9
	MIB interface	Provide
<b>PON interface Features</b>	Wavelength of the optical module of the EPON port	Downlink 1490nm; uplink 1310nm
	Rate	Symmetric uplink and downlink: 1.25G
	Average irradiating power of the PON port	+2dbm ~ +7dbm
	Optical reception sensibility of the PON port	-30dBm
	Maximum optical coupling ratio	1:64
<b>Attributes of the unsymmetrical 10GEPON port</b>	Wavelength of the optical module of the 10GPON port	Downlink 1577nm/1490nm; uplink 1310nm
	Rate	Downlink 10G, uplink 1.25G
	Average irradiating power of the PON port	+2dbm ~ +7dbm
	Optical	-30dBm

	reception sensibility of the PON port			
	Maximum optical coupling ratio	1 : 128		
<b>Attributes of the symmetrical 10GEPON port</b>	Wavelength of the optical module of the 10GPON port	Downlink 1577nm/1490nm; uplink 1270nm/1310nm		
	Rate	Downlink 10G, uplink 10G		
	Average irradiating power of the PON port	+2dbm ~ +7dbm		
	Optical reception sensibility of the PON port	-30dBm		
	Maximum optical coupling ratio	1 : 128		
<b>Physical specification</b>	Relative Humidity	10%~90% no condensation		
	Working temperature	0°C~50°C		
	Power Source's Characteristics	AC power: 100-240VAC, 50/60 Hz DC power: -48V		
	Power redundancy	1+1 backup and hot swap		
	Physical size (H*W*L)	266.4mm×482.6mm×548mm	399.7mm×482.6mm×548mm	533.1mm×482.6mm×548mm
	Power consumption	600W	600W	1000W