

## DS-3E3756TF Switch



### Features and Functions

- DS-3E3756TF supports the telecom-level Ethernet-ring protection protocol with a protection shift time of less than 50ms, STP/RSTP, backup of active and standby uplinks, and LACP link aggregation to cater to the requirements of high reliability of carriers;
- DS-3E3756TF has powerful ACL functions to access and control L2-L7 data, providing carriers flexible and various policy control methods;
- DS-3E3756TF supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade;
- DS-3E3756TF supports various L2 multicast functions such as IGMP-snooping, user fast-leave mechanism and trans-vlan multicast copy;
- DS-3E3756TF supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority to better streamline carrier's services;
- DS-3E3756TF provides flexible bandwidth control policies, supporting port-/flow-based flow limit, and ensuring the line speed forwarding of each port to make sure the high quality of network services;
- DS-3E3756TF supports multiple queue schedule algorithms such as SP, WRR, or "SP plus WRR";
- Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP-related SYN Flood, UDP Flood, Broadcast Storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions;
- Perfect security authentication mechanisms: IEEE 802.1x, Radius and BDTacacs+;
- DS-3E3756TF supports storm/multicast/unicast limit which ensures the normal running of equipment in harsh network conditions;
- DS-3E3756TF supports perfect ring detection mechanism which ensures the long-term stable running of network;
- DS-3E3756TF supports port isolation within the same VLAN, DHCP-Snooping, and IP plus MAC plus Port binding for ensuring user data security;
- DS-3E3756TF Supports the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6, path MTU discovery, DHCPv6, etc; Supports IPv6 tunnel: manual tunnel, automatic tunnel, GRE tunnel, 6to4 tunnel, ISATAP; Supports IPv4 transiting to IPv6: IPv6 manual tunnel, automatic tunnel, 6 to 4 tunnel, ISATAP tunnel.
- DS-3E3756TF supports many management modes such as the console port, Telnet, SSH;
- DS-3E3756TF supports the WEB management mode, which is easy and efficient so that it makes installation and debugging convenient;



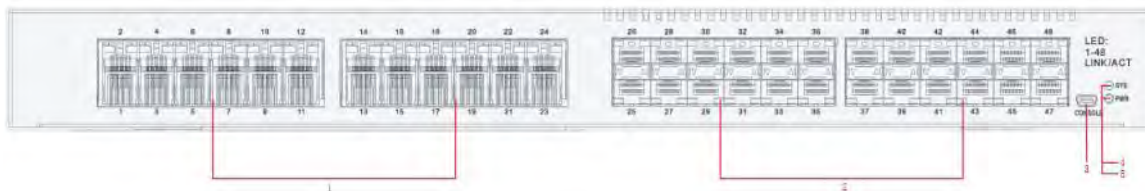
## Specifications

Item	DS-3E3756TF
Backplane	256Gbps
Forwarding rate	136Mpps
MAC	64K
Ports	24 10/100/1000M Base-T ports+24 1000Base-X ports +8 10G SFP+ ports
Dimensions(W×D×H)(mm)	442.5×350×44
Consumption	<55W
Power supply	AC: 100V-240V, 50Hz±10%
Environment	Operating temperature/humidity: 0°C-45°C, 5%-95% non-condensing Storage temperature/humidity: -20°C-70°C; 5%-95% non-condensing
MAC exchange	Support 64K MAC address table; Support to view and remove MAC addresses Support MAC address aging time configurable Support MAC Sticky based on port constraint MAC address learning and dynamic binding MAC Supports static, dynamic, and black hole MAC table entries. Support source MAC address filtering
VLAN	Support IEEE 802.1Q (VLAN), the whole machine supports 4K VLAN. Support GVRP Support QinQ Support VLAN based on MAC/ protocol /IP subnet / policy / port Support Private VLAN Support 1:1 and N:1 VLAN Mapping functions
IPv4	Static Routing, RIPv1/2, RIPv6, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGP4+, ECMP, Routing Strategy
IPv6	Support ND (Neighbor Discovery) Support PMTU Support Ipv6 Ping, Ipv6 Tracert, Ipv6 Telnet Support ACL based on source Ipv6 address, destination Ipv6 address, four port, protocol type, and so on. Support MLD v1/v2 snooping (Multicast Listener Discovery snooping)
QoS	It supports speed limit on port direction and direction. Supports 8 priority queues per port. Support mapping from message 802.1p to different queues Support SP, WRR and SP+WRR algorithm Support for message priority and message redirection Support L2 (Layer 2) ~L4 (Layer 4) packet filtering function, provide source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP protocol source/destination port number, protocol, VLAN packet filtering function Support functions based on queue speed limit and port shaping.
MCE	Support MCE
MPLS VPN	LDP protocol P/PE of MPLS VPN

	<p>MPLS TE</p> <p>MPLS OAM</p>
Multicast	<p>Support IGMP v1/v2/v3 Snooping and fast leave mechanism</p> <p>Supporting multicast forwarding in VLAN and multicast multi VLAN replication</p> <p>Multicast load sharing supporting bundled ports</p> <p>Support controllable multicast</p> <p>Port based multicast traffic statistics</p> <p>Support IGMP v1/v2/v3, PIM-SM, PIM-DM, PIM-SSM</p>
Virtualization	<p>Support VSS virtualization technology</p>
Reliability	<p>Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocol.</p> <p>Support EAPS (Ethernet loop protection protocol) and MEAPS (fast ring network protection protocol).</p> <p>Support FlexLinkLite tree topology protection mechanism to provide millisecond protection for primary and secondary links.</p> <p>Support BPDU protection, root protection and loopback protection.</p> <p>Support VRRP</p> <p>Support GR for OSPF, BGP</p> <p>Support BFD for OSPF, BGP</p>
Security	<p>Support 802.1x, support single port maximum user number limit</p> <p>Storm suppression</p> <p>Filter</p> <p>User level management and password protection</p> <p>Support AAA authentication, support Radius, TACACS+ and many other ways.</p> <p>Support 802.1X authentication, support MAC authentication, and support MAC bypass authentication.</p> <p>Support to prevent DOS, ARP attack function, ICMP anti attack</p> <p>Support binding of IP, MAC, port and VLAN</p> <p>Support MAC address learning limit</p> <p>Support DHCP Snooping</p> <p>Support port isolation, Sticky MAC</p> <p>Support MAC address filtering</p> <p>Support SSH V2.0</p> <p>Support multicast, broadcast and unknown unicast message suppression</p> <p>Support CPU protection function</p>
Management	<p>Console, Telnet, SSH2.0, Web</p> <p>SNMP v1/v2/v3</p> <p>TFTP</p> <p>RMON</p>

# Physical Interfaces

## Front Panel



No.	Abbrev.	Name	Description
1	RJ45	24 gigabit Ethernet Base-T ports	24 gigabit Ethernet Base-T ports
2	SFP	24 gigabit SFP ports	24 gigabit SFP ports
3	Console	Console port	Manages the switch locally.
4	SYS	System indicator	<p>If the indicator is always on, the system is normally started up.</p> <p>If the indicator flickers, the system works normally.</p>
5	PWR	Power indicator	If the switch is powered on, the indicator is on.

Distributed by



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