


## Product information

### OS34-151604T6T6T5-TFFZ999HHSE2AXX.X.XX

<b>Name</b>		<b>OS34-151604T6T6T5-TFFZ999HHSE2AXX.X.XX</b>
		
<b>Life cycle</b>		
<b>Availability</b>	available	
<b>Product Description</b>		
<b>Description</b>	Managed IP65 / IP67 switch in accordance with IEEE 802.3, store-and-forward-switching, HiOS Layer 2 Advanced, electrical Gigabit uplink-ports, power sourcing equipment in accordance with IEEE 802.3at (PoE+ inline power)	
<b>Port type and quantity</b>	20 ports in total; Local ports 10/100 BASE-TX, M12 „D“-coded, 4-pin; Uplink ports 1000 BASE T, M12 „X“-coded, 8-pins 15 x PoE(+) Ports (phantom power); TP-cable, auto-crossing, auto-negotiation, auto-polarity	
<b>Type</b>	OS34-151604T6T6T5-TFFZ999HHSE2AXX.X.XX	
<b>Order No.</b>	942 133-999	
<b>More Interfaces</b>		
<b>Power supply/signaling contact</b>	7/8" connector, 5 pins / M12 connector, 5 pins, „A“-coding	
<b>V.24 interface</b>	1 x M12 4-pin connector, A coding	
<b>USB interface</b>	1 x M12 5-pin socket, A coding	
<b>Network size - length of cable</b>		
<b>Twisted pair (TP)</b>	0-100 m	
<b>Network size - cascability</b>		
<b>Line - / star topology</b>	any	
<b>Ring structure (HIPER-Ring) quantity switches</b>	MRP, HIPER-Ring max. 50 switches (reconfiguration time 0.3 s), RSTP	
<b>Power requirements</b>		
<b>Operating voltage</b>	24/36/48 VDC (16.8 .. 60 VDC)	
<b>Power consumption</b>	27 W	
<b>Redundancy functions</b>	redundant power supplies	
<b>Software</b>		
<b>Management</b>	TFTP, SFTP, SCP, LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet, DNS Client	
<b>Diagnostics</b>	Management Address Conflict Detection, MAC Notification, Signal Contact, Device Status Indication, TCPDump, LEDs, Syslog, Persistent Logging on ACA, Email Notification, Port Monitoring with Auto-Disable, Link Flap Detection, Overload Detection, Duplex Mismatch Detection, Link Speed and Duplex Monitoring, RMON (1,2,3,9), Port Mirroring 1:1, Port Mirroring 8:1, Port Mirroring N:1, RSPAN, SFLOW, VLAN Mirroring, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management (temperature, optical input and output power), Configuration Check dialog, Switch Dump, Snapshot Configuration feature	
<b>Security</b>	MAC-based Port Security, Port-based Access Control with 802.1X, Guest/unauthenticated VLAN, Integrated Authentication Server (IAS), RADIUS VLAN Assignment, RADIUS Policy Assignment, Multi-Client Authentication per Port, MAC Authentication Bypass, DHCP Snooping, Dynamic ARP Inspection, Automatic Denial-of-Service Prevention, Ingress MAC-based ACL, Ingress IPv4-based ACL, Time-based ACL, VLAN-based ACL, Ingress VLAN-based ACL, ACL Flow-based Limiting, Access to Management restricted by VLAN, Device Security Indication, Audit Trail, CLI Logging, HTTPS Certificate Management, Restricted Management Access, Appropriate Use Banner, Configurable Password Policy, Configurable Number of Login Attempts, SNMP Logging, Multiple Privilege Levels, Local User Management, Remote Authentication via RADIUS, User Account Locking, LDAP	
<b>Redundancy</b>	HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), MRP over Link Aggregation, Sub Ring Manager, RSTP 802.1D-2004 (IEC62439-1), RSTP Guards	
<b>Industrial profiles</b>	EtherNet/IP Protocol, IEC61850 Protocol (MMS server, switch model), ModbusTCP, PROFINET IO Protocol	
<b>Time synchronisation</b>	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server	
<b>Flow control</b>	Queue-Shaping / Max. Queue Bandwidth, Flow Control (802.3X), Egress Interface Shaping, Ingress Storm Protection	
<b>Switching</b>	Independent VLAN Learning, Fast Aging, Static Unicast/Multicast Address Entries, QoS / Port Prioritization (802.1D/p), TOS/DSCP Prioritization, Interface Trust Mode, CoS Queue Management, IP Ingress DiffServ Classification and Policing, Jumbo Frames, VLAN (802.1Q), Protocol-based VLAN, Voice VLAN, MAC-based VLAN, IP subnet-based VLAN, IGMP Snooping/Querier per VLAN (v1/v2/v3), Unknown Multicast Filtering, Multiple VLAN Registration Protocol (MVRP), Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP)	



<b>Presettings</b>	MRP, RSTP
<b>Miscellaneous</b>	Dual Software Image Support, PoE (802.3AF), PoE+ (802.3AT), PoE+ Manual Power Management, PoE Fast Startup, VLAN Unaware Mode, Manual Cable Crossing, Port Power Down
<b>Diagnostics features</b>	
<b>Diagnostic functions</b>	LEDs
<b>Ambient conditions</b>	
<b>Operating temperature</b>	-40-+70 °C
<b>Storage/transport temperature</b>	-40- +85 °C
<b>Relative humidity</b>	10-100 %
<b>Mechanical construction</b>	
<b>Dimensions (W x H x D)</b>	261 mm x 186 mm x 95 mm
<b>Mounting</b>	Wall mounting
<b>Weight</b>	3.5 kg
<b>Protection class</b>	IP65 / IP67
<b>Mechanical stability</b>	
<b>IEC 60068-2-27 shock</b>	15 g, 11 ms duration
<b>IEC 60068-2-6 vibration</b>	5 Hz - 8.4 Hz, 3.5 mm
<b>EMC interference immunity</b>	
<b>EN 61000-4-2 electrostatic discharge (ESD)</b>	4 kV contact discharge, 8 kV air discharge
<b>EN 61000-4-3 electromagnetic field</b>	10 V/m (80-3000 MHz)
<b>EN 61000-4-4 fast transients (burst)</b>	2 kV power line, 4 kV data line
<b>EN 61000-4-5 surge voltage</b>	power lines: 2 kV (line/earth), 1 kV (line/line), data lines: 1 kV (line/earth)
<b>EN 61000-4-6 conducted immunity</b>	10 V (150 kHz-80 MHz)
<b>EMC emitted immunity</b>	
<b>FCC CFR47 Part 15</b>	FCC CFR47 Part 15 Class A
<b>EN 55022</b>	EN 55022 Class A
<b>Approvals</b>	
<b>Basic standard</b>	CE; FCC; EN61131
<b>Safety of industrial control equipment</b>	EN60950-1
<b>Scope of delivery and accessories</b>	
<b>Scope of delivery</b>	Connector for power supply, description and operating instructions

For more information please contact:

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The information/details merely contain general descriptions or performance factors which, when applied in an actual situation, do not always correspond with the described form, and may be amended by way of the further development of products.

These are the prominent technical specifications. For complete technical specifications visit: [www.hirschmann.com](http://www.hirschmann.com)