

# Production Information

## HEST12LM Series

EN50155 Industrial Ethernet Layer-3 Core Switch



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## Features

- Up to 12 10/100BaseT Ethernet Port (M12 Connector)
- Support Layer 3 Routing Protocol, ACL and NAT, etc
- Dual Power Supplies for Power Redundancy, Voltage 24~160VDC (Type:48V/110V)
- Fanless Cooling Design, Support -40~75°C Operating Temperature, IP67
- Alarm with One Relay Output (M12 Connector), Current Loading 2A@30V
- Support Bypass Function to Allow Continuous Communication throughout the Train

## Introduction

HEST12LM series switches are designed for the backbone communications for the critical on-board train communications. Bridged between multiple and complex industrial networks, HEST12LM switches are designed to ensure that robust and highly efficient network communications are guaranteed for the critical tasks within a train.

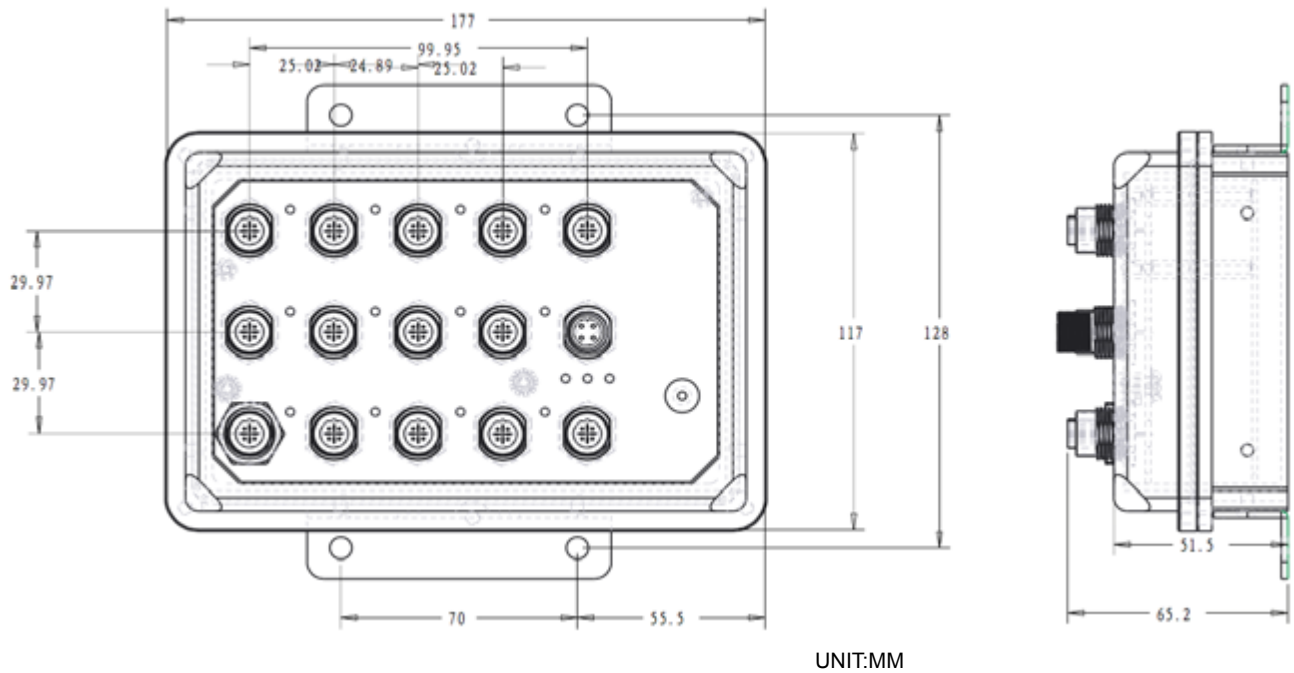
Compliant with IEC61375、EN51055 and EN50121 standards, and working under extreme temperatures (-40°C to +75°C), these highly compactly-designed industrial switches can meet any hazardous environments while providing robust communication requirements for critical applications such as train traction and/or braking command requirements through these reliable devices.

Support up to 12 10/100BaseT(X) M12 Ethernet ports , and dual-powered by 24-160VDC (type:48VDC/110VDC) power supplies, this line of switches provide a full set of network data management functions such as redundancy recovery, VLAN, QoS, IGMP, Trunking, SNMP, etc., in addition to the hardened M12 connector and IP67 enclosure protection. These devices have an average MTBF of 438,000 hours. They all can be wall-mounted.

## Specifications

<b>Technology</b>		<b>Connector</b>	
IEEE Standards:	IEEE802.3、IEEE802.3u、IEEE802.3z、IEEE802.3x、IEEE802.3ad、IEEE802.1p、IEEE802.3ab、IEEE802.1Q、IEEE802.1d、IEEE802.1s	Ethernet port:	12 x 10/100M
Processing Type:	Store and Forward	Management port:	1 x Console , M12 Connector
MAC Address:	16k	Alarm:	1 x Alarm, M12 Connector
L3 table:	4k	Power supply:	1 x Power Supply Port, M12 connector
Management:	Web+CLI	<b>Mechanics</b>	
RingOn™:	Recovery time<15ms	Enclosure:	IP67, High Strength Aluminium
Flow Control:	IEEE802.3x Flow Control, Back Pressure Flow Control	Installation:	Wall mounted
L3 Protocol:	Static IP routing、RIPv1/v2、VRRP、IGMPv2/v3 Snooping、IGMP PROXY、ACL、NAT、Port Mirroring	Dimension:	L* W * H: 177*51.5*117mm
Protocol:	IGMP Snooping, GMRP, SNMPv1/v2c/v3, DHCP Client, SNTP, HTTP, HTTPS, Telnet, NTP Client	Weight:	1200g
Software:	<ul style="list-style-type: none"> <li>• System log setting</li> <li>• Web server password setting</li> <li>• IP access control (Accessible IP)</li> <li>• Port setting</li> <li>• IP setting</li> <li>• Time setting (Local Time/NTP Time)</li> <li>• QoS、802.1P、DSCP、ToS DiffServe</li> <li>• IGMP Snooping</li> <li>• Broadcast Storm control</li> <li>• Traffic control</li> <li>• Port Mirroring</li> <li>• Static MAC Address Forwarding (Unicast and Multicast)</li> <li>• SNMP V1/V2</li> <li>• Diagnostics</li> <li>• Email/Relay Alarm Notification</li> <li>• Flow statistics</li> <li>• MAC Table</li> <li>• Log</li> <li>• Firmware upgrade</li> <li>• Parameters backup</li> <li>• Factory reset</li> </ul>	Power:	20W (MAX)
		Cooling:	Fanless
		<b>Environment Limits</b>	
		Storage Temperature:	-40~85°C
		Operation Temperature:	-40~75°C
		Relative Humidity:	5~95%RH
		Ingress Protection:	IP67
		MTBF:	Above 30 Years
		<b>Certifications</b>	
		Rail Traffic:	EN50155, EN50121-3-2
		EMI:	FCC Part 15 Subpart B Class A, EN 55022 Class A
		EMS:	EN 61000-4-2 (ESD) Level 3 EN 61000-4-3 (RS) Level 3 EN 61000-4-4 (EFT) Level 3 EN 61000-4-5 (Surge) Level 3 EN 61000-4-6 (CS) Level 3 EN 61000-4-8 EN 61000-4-11
		Freefall:	IEC60068-2-32
		Vibration:	IEC61373

DIMENSION DRAWING



## Ordering Information

HEST12LM-VLW	Industrial Ethernet Layer 3 Managed Switch, 12 10/100BaseT(X) M12 ports, -40°C to 75°C operating temperature, 24~160VDC(type:48/110VDC) Dual Power Input. IP67 protection
HEST8LM-VLW	Industrial Ethernet Layer 3 Managed Switch, 8 10/100BaseT(X) M12 ports, -40°C to 75°C operating temperature, 24~160VDC(type:48/110VDC) Dual Power Input. IP67 protection