

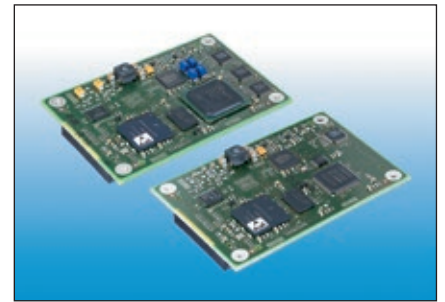


## Embedded Ethernet Switches

### Embedded Ethernet Switches EES20 and EES25

Embedded Ethernet from Hirschmann brings network connectivity right into the intelligent automation equipment itself, allowing manufacturers to focus on their own core business.

The Embedded Ethernet EES20 and EES25 switches each have six Fast Ethernet ports that can be configured for either 10/100 BASE TX or 100 BASE FX. They also offer extensive management and filter functions plus a variety of redundancy protocols and port security. In addition, the EES25 supports precise synchronization as per IEEE 1588v2, plus PRP (Parallel Redundancy Protocol) and HSR (High-availability Seamless Redundancy Protocol), which guarantee uninterrupted data communication. Both versions can be integrated into the Hirschmann network management software Industrial HiVision.



Example of Embedded Ethernet Switch EES25 on development kit



### Technical Information

Product Description			
Type: Embedded Ethernet Switch	EES20-0600UHIHSH2E	EES25-0600UHIHMH2E	EES25-0600UHIHHPH2E
Description	Managed Fast Ethernet Switch nach IEEE 802.3, store-and-forward-switching		
Port Type and Quantity	6 x Fast Ethernet ports, configurable as 100BaseTX or 100BaseFX, RX+/RX-and TX+/TX- signals per port		
Order-No.	942 050-001	942 050-002	942 050-003
More Interfaces			
Control/Status	RS232 (Configuration), SPI (Status), SNMP traps (Alarme), SNMP		
Time Synchronization	–	PPS output (pulse-per-second), IRIG-B output, controlled by PTP ordinary clock	
Host Interface	2 x 50-pin male connectors		
Network			
Line-/Star Topology	any		
Redundancy	RSTP, Media Redundancy Protocol (MRP, IEC 62439-2), 200 ms recovery	RSTP, Media Redundancy Protocol (MRP, IEC 62439-2), 10 ms recovery	RSTP, Media Redundancy Protocol (MRP, IEC 62439-2), 200 ms recovery, Parallel Redundancy Protocol (PRP, IEC 62439-3) RedBox
Power Requirements			
Operating Voltage	+3.3 V DC +/- 5%		
Power Consumption	2.9 W	4.6 W	4.6 W
Software			
Supported HiOS Software Levels	Layer 2 Enhanced (L2E)		
Mechanical Construction			
Dimensions (WxHxD)	88 x 13 x 60 mm		
Weight	35 g		
Ambient Conditions			
Operating Temperature	-40 °C to +85 °C		
PCB Protection	optional: conformal coating		
Accessories			
Accessories to Order Separately	EES development kit – Order-No. 942 049-001		

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

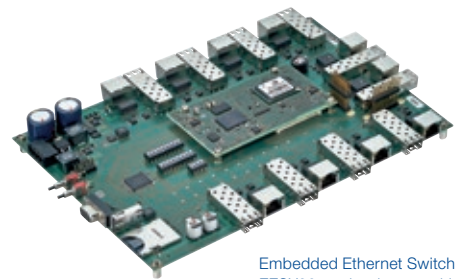
## Embedded Ethernet Switches



### Embedded Ethernet Switches EESX20 and EESX30

The Embedded Ethernet EESX20 switch has eight Fast Ethernet ports that can be configured for either 10/100BASE-TX or 100BASE-FX. The EESX30 version has an additional two gigabit ports, configurable as 10/100/1000BASE-TX or 100/1000BASEFX. Both variants offer extensive management and filter functions, plus a variety of redundancy protocols and port security.

The Embedded Ethernet EESX20 and EESX30 switches can be integrated into the Hirschmann network management software Industrial HiVision.



Embedded Ethernet Switch  
EESX30 on development kit



### Technical Information

Product Description		
Type: Embedded Ethernet Switch	EESX20-0800xxx	EESX30-0802xxx
Description	Managed Fast Ethernet Switch according to IEEE 802.3, store-and-forward-switching	
Port Type and Quantity	8 x 10/100 MBit/s ports	8 x 10/100 MBit/s + 2 x 10/100/1000 MBit/s ports
Order-No.	942 100-999 (configurable)	
More Interfaces		
Control/Status	RS232 (configuration), SPI (status), SNMP traps (alarms), SNMP	
Host Interface	120-pin and 80-pin male connectors	
Network		
Line-/Star Topology	Any	
Redundancy	RSTP, Media Redundancy Protocol (MRP, IEC 62439-2), 200 ms recovery	
Power Requirements		
Operating Voltage	+3.3 V +/- 5%	
Power Consumption	3 W	5 W
Software		
Supported HiOS Software Levels	Layer 2 Enhanced (L2E)	
Mechanical Construction		
Dimensions (WxHxD)	102 x 69 x 8 mm, with cooling adaptor 105 x 72 x 16 mm	
Weight	40 g	
Ambient Conditions		
Operating Temperature	-40 °C to +85 °C (16h) permanent +70 °C	
PCB Protection	Optional: conformal coating	
Accessories		
Accessories to Order Separately	EESX30-0802 development kit – Order-No. 942 099-001	

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