S105 Unmanaged Industrial Switch
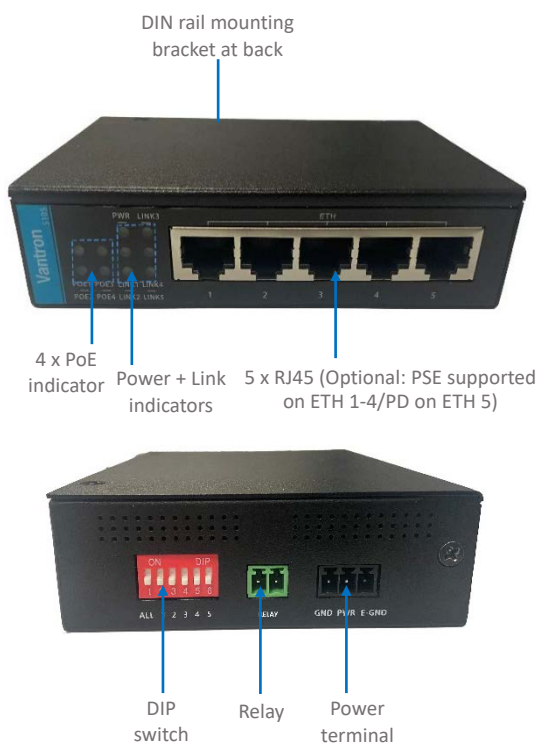
▬ Product Brief

The S105 unmanaged industrial switch enriches Vantron's hardware solutions for industrial automation. It features 5 Megabit Ethernet jacks, providing an efficient and reliable solution for industrial networking needs.

The S105 is a Plug-and-Play solution that minimizes users' educational inputs. Its compact and space-saving design makes it a preference for users who value networking efficiency. It supports a 12V~48V wide input voltage and operates at an industrial-grade extended temperature range (-20℃ ~ +75℃), ensuring excellent performance even under demanding conditions. It offers PSE options to provide up to 30W power output to client devices. It also offers an option for the PD feature to receive power supply from a PSE. A DIN rail bracket is attached to the back of the enclosure for flexible installation of the device.

Switches are usually used in harsh environments that require stable operation and involve data interaction between a range of devices, and the S105 is particularly designed for rail transit, smart city, intelligent mining, etc.
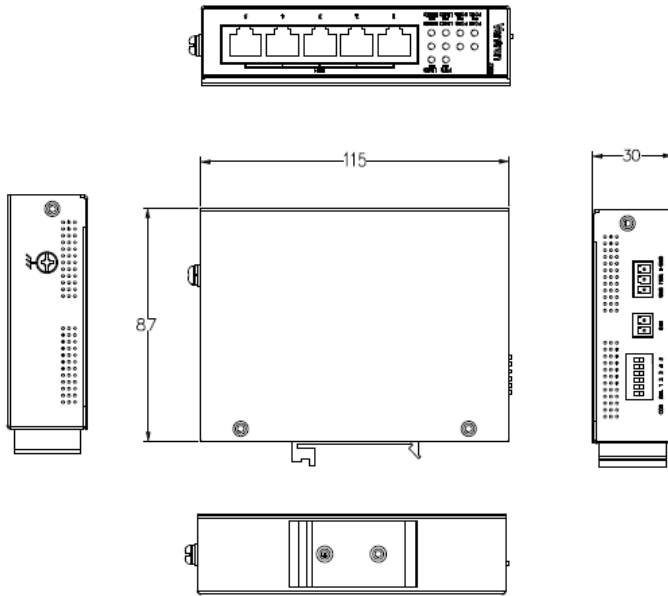
▬ Exterior and Features

DIN rail mounting
bracket at back

4 x PoE
indicator

Power + Link
indicators

5 x RJ45 (Optional: PSE supported
on ETH 1-4/PD on ETH 5)

DIP
switch

Relay

Power
terminal

S105
Plug and play
Adaptive full/half duplex Ethernet jacks
PoE option supported
Alarm relay
Prolonged longevity
Efficient fanless heat dissipation
Wide input voltage & temperature range
Compact size, easy to deploy

S105 Unmanaged Industrial Switch Datasheet

		S105
Ethernet	Interface	5 x RJ45, 10/100M Base-T (X), automatic flow control, adaptive full/half duplex
	Standard	IEEE802.3 IEEE802.3u IEEE802.3x (flow control)
	PSE (optional)	IEEE 802.3af, IEEE 802.3at ETH 1~ ETH 4 (Max. 30W power output in total)
	PD (optional)	Eth 5
Data transfer	Forwarding mode	Store-and-forward
	MAC address table	1K
	Switching capability	1Gbps
	Packet forwarding rate	0.75Mpp
	Packet buffer	1Mb
System control	Alarm relay	1 x 2-pin x 3.81mm
	LED indicator	1 x Power indicator (solid green after power on) 4 x PoE indicator (corresponding to ETH 1~ ETH 4) 5 x Network indicator (slow blinking for link; fast blinking for data transfer)
	DIP switch	1 x DIP switch (multi-/single-jack connection check)
Mechanical	Dimensions	115mm x 87mm x 30mm
	Installation	DIN rail mounting
	MTBF	≥30,000 H
	IP rating	IP40
Power	Input	12V~48V DC (48V-53.2V DC for PSE feature), 1 x 3-pin x 3.81mm terminal block (Over-current protection, reverse polarity protection)
	Consumption	< 32.1W (with four S105 connected)
Environment condition	Temperature	Operating: -20℃ ~ +75℃ Storage: -40℃ ~ +85℃
	Humidity	Operating: RH 5-95% (Non-condensing)
	EMC level	> EMC Level 3
	Certification	CCC, FCC, RoHS
Test standard	Industrial standard	IEC61000-4-2 (ESD): ±6kV (contact), ±8kV (air) IEC61000-4-4 (EFT): Power: ±2kV, Signal: ±1kV IEC61000-4-5 (Surge): Power: ±1kV (differential), ±2kV (common), Signal: ±1kV (differential), ±2kV (common) IEC60068-2-6 (Vibration) IEC60068-2-27 (Shock) IEC60068-2-32 (Free fall)

Product Outlines

Ordering Information

Ordering No.	PSE	PD	Alarm relay	DIN rail mounting bracket
S105-PD	-	Yes	Yes	Yes
S105-PR	Yes	-	Yes	Yes
S105	-	-	Yes	Yes

Packing list	
S105 industrial switch	1
DIN rail mounting bracket	1

Optional accessories	
12V Power adapter & power cord	1 kit
DC Power connector	1

Since its establishment in 2002 by two Silicon Valley entrepreneurs, Vantron Technology has been at the forefront of the connected IoT devices and IoT platform solutions. Today, Vantron boasts a global customer base that includes several Fortune 500 companies. Its product lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere cloud device management platform.

Vantron offers IoT communication devices that enable multi-protocol connections for industrial equipment and local data processing through edge computing. With abundant wired and wireless connectivity options, remote operations and maintenance have become easier than ever. Such devices can be deployed across different sectors such as smart retail, medical and warehousing. Moreover, Vantron's IoT solutions are designed to facilitate enterprises' digital transformation, streamline operations, enhance productivity, etc.