

VT-IO-DAM0444

Industrial I/O Converter



Product Brief

VT-IO-DAM0444 industrial I/O converter is equipped with multiple digital input (DI), digital output (DO), and analog input (AI) channels, providing versatile connectivity options for industrial applications. It is specifically designed to efficiently convert both digital and analog signals into RS485 bus signals, enabling seamless uplink data transmission through serial communication protocols like Modbus RTU. With the converter, edge data from PLCs and sensors in the industrial field can be effortlessly transferred to a range of industrial devices, including gateways, routers, and industrial DTUs.

VT-IO-DAM0444 is constructed with a compact and rugged design, ensuring durability and reliability in harsh industrial environments. Additionally, its flexible installation options enhance its adaptability to various industrial setups

Exterior and Features



VT-IO-DAM0444



Multiple DI/AI/DO connectivity options



RS485 for uplink data transfer (Modbus RTU)



Ultra-low power consumption



Efficient fanless heat dissipation



Hassle-free setup and operation



Wide operating temperature range

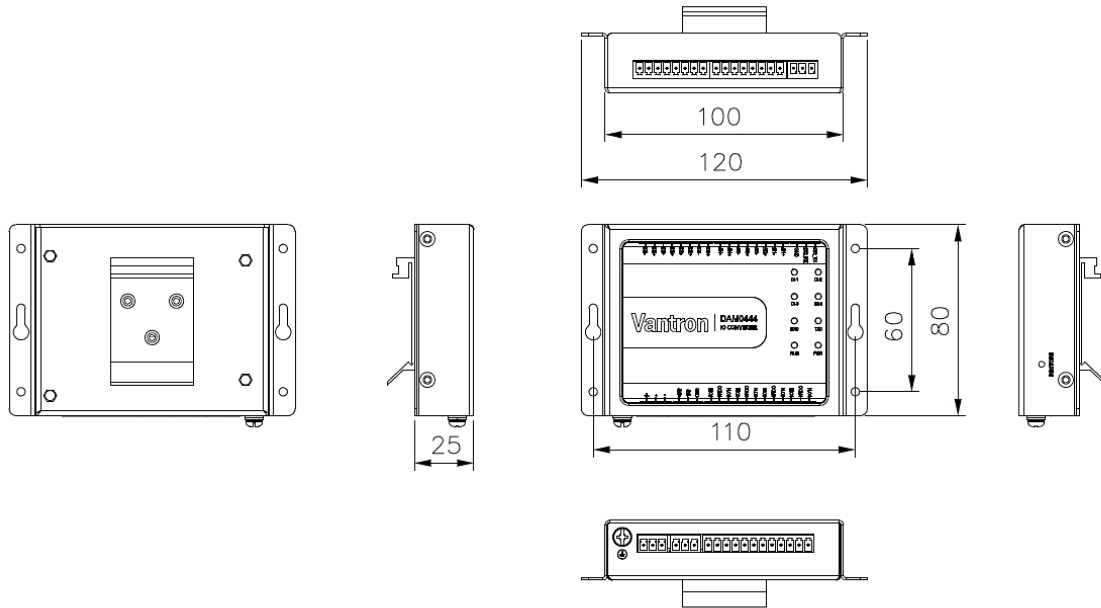


Flexible installation for quick deployment

VT-IO-DAM0444 Industrial DTU Datasheet

VT-IO-DAM0444		
System	MCU	STM32F030C8T6
	Memory	8KB
	Storage	64KB
I/Os	Serial port	1 x RS232 for device configuration & debugging (TTL, 115200, 8N1) 1 x RS485 for data communication (TTL, 115200, 8N1)
	AI	4 x AI (Measurement signal: 4~20mA; Accuracy: 3%; Resolution: 12-bit; Impedance: 240 Ω)
	DI	4 x DI (Dry contact; Frequency: 1kHz)
	DO	4 x DO (Contact capacity: 30V/500mA)
System Control	LED indicator	1 x Power indicator
		1 x System status indicator
		4 x DI channel indicator
2 x RS485 working indicator (RXD & TXD)		
Button	1 x Restore button (1~3s: Restart the device; > 3s: Factory reset)	
Mechanical	Enclosure	Metal
	Dimensions	120mm x 80mm x 25mm (including the mounting brackets)
	Installation	Wall mounting, DIN rail mounting
	IP rating	IP30
Power	Input	12V DC
		1 x Power terminal (3-pin, 3.81mm)
	Consumption	< 5W (load)
Software	Uplink protocol	Modbus RTU
	OS	RTOS
Environment Condition	Temperature	Operating: -40°C ~ +85°C
		Storage: -40°C ~ +85°C
	Humidity	Operating: 5%-95% RH (Non-condensing)
	EMC level	EMC Level 3
	Certification	FCC, IC, CE

Product Outlines



Ordering Information

Ordering No.	I/O	Voltage	Installation
VT-IO-DAM0444	RS485, RS232 (debug), AI, DI, DO	12V DC	Wall mounting, DIN rail mounting

Packing list	
VT-IO-DAM0444 industrial I/O converter	1
DI, DO, AI terminal connector	1 for each
DC power connector	1

Optional accessories	
12V 1A DC Power adapter & power cord	1 kit
Debug cable	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 Fortune Global 500 companies. Its product lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere cloud platforms.

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.