

MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB PM566-TP-ETH 1SAP121500R0071

Product Reference

ABB PM566-TP-ETH AC500-eCo PLC Processor Module

DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited ABB manufacturer sources. No product photograph is included.

Product / lookup identity	ABB PM566-TP-ETH 1SAP121500R0071
Reference number	1SAP121500R0071
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/pm566-tp-eth-1sap121500r0071>

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Product role and published parameters

WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

ABB PM566-TP-ETH, order code 1SAP121500R0071, is a Classic AC500-eCo programmable logic controller processor module with 512 kB program memory, onboard mixed I/O, RS-485 communication, and Ethernet. It executes cyclic and time-controlled PLC application logic, coordinates onboard and expansion I/O, and exchanges control and diagnostic data with connected devices. System context: ABB PM566-TP-ETH AC500-eCo PLC Processor Module.

Published field	Manufacturer-published value or verified identity note
Manufacturer	ABB
Model	PM566-TP-ETH
Order code	1SAP121500R0071
Product type	AC500-eCo programmable logic controller processor module
Lifecycle	Classic
Program memory	512 kB Flash EPROM
Processor	32-bit Freescale ARM, 50 MHz

System function and signal path

01	Digital Inputs: Six 24 V DC onboard inputs. ABB states that two can serve as counter inputs or up to four as interrupt inputs; the two analog inputs can also be configured as 24 V DC digital inputs, giving up to eight onboard digital inputs.
02	Digital Outputs: Six 24 V DC transistor outputs rated 0.5 A nominal per channel for commands to compatible field loads through the specified terminal blocks and protection.
03	Analog Inputs: Two 0...10 V channels for voltage signals, alternatively configurable as 24 V DC digital inputs.
04	Analog Output: One configurable voltage/current output: 0...10 V, 0...20 mA, or 4...20 mA.

Applications, answers, and official sources

1 Compact machine control: Executes PLC logic while acquiring local switches and sensors and commanding 24 V DC transistor loads in a compact machine panel.

2 Mixed-signal process skid: Combines 24 V digital I/O with two 0...10 V measurements and one voltage/current command for pumps, valves, dosing, or utility equipment.

3 Ethernet-connected automation cell: Uses programming, Modbus TCP/IP, UDP/IP, web-server, DHCP, FTP, and SNTP functions on the documented Ethernet interface.

4 Expandable local and serial control station: Adds up to ten S500/S500-eCo modules and integrates RS-485 Modbus/ASCII or a CS31 master network when configured to ABB requirements.

Frequently asked questions

What is ABB PM566-TP-ETH 1SAP121500R0071?	It is a Classic AC500-eCo PLC processor module with 512 kB program memory, mixed onboard I/O, RS-485, and Ethernet.
What onboard I/O does it provide?	It has 6 digital inputs, 6 transistor digital outputs, 2 analog inputs, and 1 analog output.
What signals do the digital channels use?	The inputs use 24 V DC. The six transistor outputs use 24 V DC and are rated 0.5 A nominal per channel.
What analog input range is supported?	Both onboard analog inputs support 0...10 V and can alternatively be configured as 24 V DC digital inputs.
What analog output ranges are supported?	The single analog output can be configured for 0...10 V, 0...20 mA, or 4...20 mA.
What does COM1 support?	COM1 is RS-485 for programming, Modbus master/slave, serial ASCII, or CS31 master operation.

Official ABB sources

ABB product page – 1SAP121500R0071	https://www.abb.com/global/en/products/1sap121500r0071
ABB PM554, PM556, PM564, PM566 Processor Module Data Sheet, 3ADR010065 revision 11	https://library.e.abb.com/public/a41f05008c5a4557a1a6e6b232bacb1d/PM55x_PM56x_Data_Sheet%2C%201%2C%20en_US.pdf
ABB PLC Automation Main Catalog	https://library.e.abb.com/public/f55b85def0d342bd92561ab31b85faed/3ADR020077C0204%20REV%20C%20PLC%20Automation.pdf
ABB AC500 Installation Instructions	https://library.e.abb.com/public/b9679f213ec7410db5de432a61178dd3/3ADR024117M02xx%2C%2020%2C%2020en_US%2C%20AC500_Installation_Instruction.pdf
ABB PLC Automation – AC500 platform	https://www.abb.com/global/en/areas/motion/plc