



PRODUCT REFERENCE

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1SAP121000R0001 PM564-RP

AC500-eCo processor module

Technical overview and integration reference

Manufacturer: ABB | Platform: AC500-eCo | Supply: 24 V DC

Product snapshot

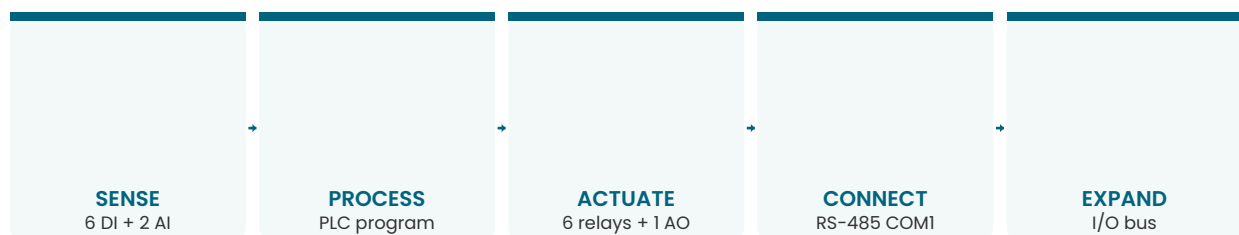
The ABB PM564-RP is a compact AC500-eCo processor module. It executes the PLC application, reads onboard digital and analog inputs, controls relay and analog outputs, communicates through COM1, and supports expansion through the I/O bus.

Processor identity Order code: 1SAP 121 000 R0001 Module: PM564-RP Supply: 24 V DC	Onboard signal mix 6 digital inputs 6 relay outputs 2 analog inputs + 1 analog output
Program capacity 128 kB Flash EPROM 10 kB VAR data 1 kB VAR_RETAIN data	Physical profile Weight: 350 g Mounting: horizontal or vertical Degree of protection: IP20 when terminal screws are tightened

Core electrical data

Power connection	Removable 5-pin screw terminal
Current consumption	110 mA typical; 240 mA maximum
Maximum power dissipation	4.5 W
Required fuse	3 A fast
I/O expansion	Maximum 10 I/O modules

Functional role



Interfaces and execution

COM1 physical interface RS-485, non-isolated 9-pin D-sub female 1.2 to 187.5 kbit/s configurable	COM1 roles Programming port Modbus master or slave Serial ASCII CS31 master
Program execution Cyclic execution Time-controlled execution Multitasking One edge-triggered interruption	Operator interface Power, Run, Error and I/O status LEDs RUN/STOP switch Password protection available

Supported programming languages

-	Instruction List (IL), Function Block Diagram (FBD), and Ladder Diagram (LD)
-	Sequential Function Chart (SFC), Structured Text (ST), and Continuous Function Chart (CFC)
-	Published cycle times for 1000 instructions: binary 0.08 ms, word 0.1 ms, floating point 1.2 ms

Usable accessories listed by ABB

MC503	Memory card	TA561-RTC	Real-time clock
TA562-RS	Serial RS-485	TA569-RS-ISO	Isolated serial RS-485
TA562-RS-RTC	Real-time clock and serial RS-485		

COM1 caution

The typical common-mode range is -8 V to +12 V. ABB states that the interface can be damaged if the signal exceeds this range.

Selection and integration notes

1	Verify the full order code 1SAP 121 000 R0001 and PM564-RP on the physical nameplate before configuration or replacement.
2	This PM564-RP variant uses relay outputs and a 24 V DC supply. Do not substitute data from PM564-TP, PM564-RP-AC, or Ethernet variants.
3	Select terminal blocks, memory, real-time clock, serial options, and other accessories for the installed system configuration.
4	Use the current ABB AC500-eCo system documentation for detailed terminal assignments, wiring diagrams, and project procedures.
5	The platform is classified for industrial applications, not domestic applications.

Document basis

Manufacturer source basis	ABB data sheet 3ADR010065, revision 8, dated 2022-01-31; ABB product record 1SAP121000R0001.
Official data sheet	library.e.abb.com - 3ADR010065
Official product record	abb.com - 1SAP121000R0001



Product page

<https://www.apterpower.com/ABB/1sap121000r0001-pm564-rp>

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Important: This document is an Apter Power reference independently prepared from manufacturer-published information. It is not an ABB manual, does not modify manufacturer specifications, and does not replace current ABB installation, safety, or engineering instructions.