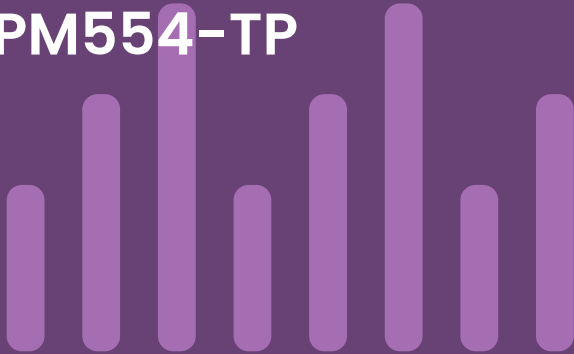


MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB SAPI20600R0001-PM554-TP

Product Reference

ABB 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 SAPI20600R0001-PM554-TP
Reference number	1SAPI20600R0001
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/1sap120600r0001-pm554-tp>

Apter Power contact

sales13@apterpower.com | +86 180 3023 5313

Product role and published parameters

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

ABB ISAPI20600R0001 PM554-TP is a 24 V DC AC500-eCo programmable logic controller processor module with 128 kB Flash EPROM. It executes IEC 61131-3 control programs, reads eight onboard 24 V DC digital inputs and drives six onboard 24 V DC transistor outputs rated up to 0.5 A each. Its non-isolated RS-485 COM1 supports programming, Modbus master/slave, serial ASCII or CS31-master operation, while the local I/O bus supports up to ten S500 or S500-eCo modules. The module is intended for compact industrial machine and plant automation requiring onboard digital I/O, serial integration and scalable local or CS31 remote I/O.

Published field	Manufacturer-published value or verified identity note
Supply	24 V DC; -15%/+20% system tolerance
Program Memory	128 kB Flash EPROM
Processor	Freescale ARM, 32-bit, 50 MHz
Digital Inputs	8 x 24 V DC
Digital Outputs	6 x 24 V DC transistor, 0.5 A maximum
Onboard Analog I/O	None
COM1	Non-isolated RS-485, 1.2-187.5 kbit/s

System function and signal path

01	Executes cyclic, time-controlled and multitasking PLC programs.
02	Reads eight onboard 24 V DC digital input signals.
03	Commands six onboard 24 V DC transistor digital outputs, maximum 0.5 A per output.
04	COM1 is non-isolated RS-485 through a 9-pin D-sub female connector, configurable from 1.2 to 187.5 kbit/s.

Applications, answers, and official sources

1 Compact machine control

2 Small flexible industrial automation systems

3 Panel-based control with onboard digital I/O

4 Systems requiring scalable S500/S500-eCo local I/O

Frequently asked questions

What is the correct ABB order code for PM554-TP?	The official order code is ISAPI20600R0001. The requested form SAPI20600R0001 is incomplete because it omits the leading 1.
What is the PM554-TP?	It is a 24 V DC AC500-eCo programmable logic controller processor module with onboard digital I/O.
How many onboard inputs and outputs does it have?	It has eight 24 V DC digital inputs and six 24 V DC transistor digital outputs rated up to 0.5 A.
Does ISAPI20600R0001 include onboard Ethernet?	No onboard Ethernet is specified for PM554-TP. PM554-TP-ETH is a different product with order code ISAPI20600R0071.
Which protocols can COM1 use?	The RS-485 COM1 port can be used as a programming port, Modbus master or slave, serial ASCII interface, or CS31 master.
How can the PM554-TP system be expanded?	Its local I/O bus supports up to ten I/O modules, and ABB states that S500 and S500-eCo modules can be mixed. CS31 can also connect remote I/O stations.

Official ABB sources

PM554-TP official ABB product page	https://www.abb.com/global/en/products/isapi20600r0001
PM554, PM556, PM564, PM566 Processor Module Data Sheet	https://library.e.abb.com/public/a41f05008c5a4557a1a6e6b232bacb1d/PM55x_PM56x_Data_Sheet%2C%201%2C%20en_US.pdf
AC500 Hardware Manual – onboard I/O in processor module PM55x	https://library.e.abb.com/public/23f045f2b0f246798983cf6e0847ec77/3ADR010121%2C%2019%2C%20%20en_US%2C%20CAA-Merger-2.pdf
Product News AC500-eCo CPUs – Change in ordering procedure	https://library.e.abb.com/public/e5db23f0deee3ae1c1257cba003e6c13/Product%20News%20ACM34_2013%20AC500-eCo%20CPUs.pdf
AC500-eCo official ABB overview	https://new.abb.com/plc/programmable-logic-controllers-plcs/ac500-eco