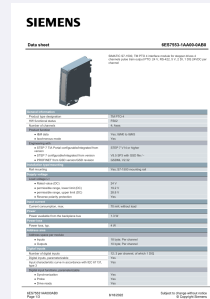


AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

Siemens 6ES7553-1AA00-0AB0

TM PTO 4 stepper-drive interface module



AXES	RS422	TTL / 24 V	SUPPLY
4	Up to 1 MHz	Up to 200 kHz	24 V DC

Siemens 6ES7553-1AA00-0AB0 is the TM PTO 4 interface module for four pulse-controlled drive axes. Each channel can use RS422, 5 V TTL or 24 V pulse signals with configurable direction and auxiliary I/O functions.

01 VERIFIED PRODUCT PARAMETERS

Axis channels	4 individually configurable pulse-output channels
Load supply L+	24 V DC; permitted range 19.2 to 28.8 V DC
Pulse interface ratings	RS422: 1 MHz; TTL 5 V and 24 V: 200 kHz maximum
Signal formats	Pulse/direction, up/down or A/B quadrature, including quadruple
Auxiliary inputs	DI0 and DI1 per channel; shared DIQ2 configurable as input/output
Digital output loads	DQn.0 / DQn.1: 0.1 A; DIQn.2: 0.5 A rated
Process address space	18 input bytes and 10 output bytes per channel
Bus cycle / jitter	250 us minimum; 375 us with all 4 channels; jitter max. 1 us
Backplane / power loss	1.3 W from backplane; typical power loss 4 W
Engineering software	STEP 7 TIA Portal V14 or higher; GSDML V2.32

Technical values were verified against Siemens data sheet, 18 August 2022; A5E38896706-AA, 12/2016 and the Siemens Industry Mall record for the exact article number.

02 MECHANICAL AND LIFECYCLE DATA

Dimensions (W x H x D)	35 x 147 x 129 mm
Weight (official datasheet)	Approx. 0.30 kg
Country of origin	Germany
Lifecycle	Spare part; Siemens successor 6ES7553-1AA01-0AB0

03 SYSTEM ROLE AND APPLICATIONS

The controller commands motion through pulse frequency and pulse count. The module returns emitted steps as position information; this is not independent measurement of mechanical position. Match the drive input circuit, channel parameters and axis project before use.

- Adjustment axes: set machine positions through a validated positioning-axis object.
- Feed axes: command a defined travel distance using pulse count and configured direction.
- Speed-controlled drives: vary the pulse frequency through a configured speed-axis object.

04 OFFICIAL INSTALLATION FACTS

- Qualified personnel must isolate the station supply and secure connected machinery before wiring.
- Use the S7-1500 rail and 40-pin front connector; do not fit potential jumpers to that connector.
- Supply terminal 41 with 24 V DC. Run separate ground wires from terminals 43 and 44 to the central supply ground.
- Select RS422, TTL or 24 V deliberately: use CHn.P/A and CHn.D/B for RS422/TTL, DQn.0 and DQn.1 for 24 V.

05 OFFICIAL DOCUMENTATION

Siemens data sheet, 18 August 2022; A5E38896706-AA, 12/2016