

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS SIMATIC S7

6ES7552-1AA00-0AB0

TIME-CONTROLLED DIDQ MODULE

Used with the applicable SIMATIC S7-1500 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official product documentation

SIEMENS



System manual

SIMATIC

S7-1500/ET 200MP

Automation system

Edition

12/2017

support.industry.siemens.com

Benefits

Technology modules for counting, measuring and position detection offer you the following advantages:

- fast and timely detection of events with fine resolution for high productivity and product quality
- hardware-level signal processing for rapid counting, measurement and position detection for a variety of transducers
- simple setup and commissioning of the technology functions in the TIA Portal
- can be used centrally in SIMATIC S7-1500 and in ET 200MP distributed I/O system
- quick response thanks to different hardware interrupts

3.8.5 Technology module for time-based IO

Extremely high requirements on precision and speed can be met with time-based IO modules - regardless of the performance of the controller and the fieldbus. Time-based IO modules ensure that signals are output with a precisely defined response time. The I/O signals are processed on a time basis.

The table below shows the main features of the technology module for time-based IO. In conjunction with the "Output cam" and "Cam track" technology objects, the TM Timer DIDQ 16x24V ensures highly accurate cam output. In conjunction with the "Measuring input" technology object, the TM Timer DIDQ 16x24V ensures highly accurate detection of passing products.

Short designation	TM Timer DIDQ 16x24V
Article number	6ES7552-1AA00-0AB0
Manual	
Connectable encoders	24 V incremental encoder with signals A and B 24 V pulse encoder with a signal
Max. count frequency	200 kHz with quadruple evaluation
Integrated DI	Up to 8 DIs with the following functions: • Up to 2 time stamps per cycle (resolution 1 µs) • 32x oversampling • Counting function up to 50 kHz • Incremental encoder acquisition with 2 phase-shifted tracks • Configurable input filter to suppress interference
Integrated DQ	Up to 16 DQs with the following functions: • Up to 2 time stamps per cycle (resolution 1 µs) • 32x oversampling • Pulse-width modulated output • Configurable substitute values per DQ
Diagnostic interrupt	X
Hardware interrupt	---
Isochronous mode	X (required for the time stamp and oversampling functions)