SIEMENS SIMATIC S7-1500T

6ES7511-1TL03-0AB0 | CPU 1511T-1 PN

Official product data extract

SIMATIC S7-1500T CPU 1511T-1 PN central processing unit with 450 KB work memory for the program, 1.5 MB for data, one PROFINET IRT interface with an integrated two-port switch, 6 ns bit performance, and a required SIMATIC Memory Card.

Identification and electrical data

Article number	6ES7511-1TL03-0AB0
Product family	SIMATIC S7-1500T
Product designation	CPU 1511T-1 PN
Hardware / firmware	Hardware functional status FS04; firmware V4.1
Rated supply voltage	24 V DC
Permissible supply range	19.2 to 28.8 V DC
Current consumption	0.56 A rated; 0.94 A maximum
Power loss	3.4 W typical
Mains buffering	5 ms stored-energy time

Memory and processing

Program work memory	450 KB integrated
Data work memory	1.5 MB integrated
Load memory	Plug-in SIMATIC Memory Card, maximum 32 GB
Memory card	One slot; SIMATIC Memory Card required
Bit / word operations	6 ns / 7 ns typical
Fixed-point / floating-point	9 ns / 37 ns typical

Interfaces and communication

PROFINET interfaces	One integrated interface
Physical interface	X1, two RJ45 ports, integrated switch, 100 Mbps
PROFINET services	IO Controller, IO Device, IRT, MRP, MRPD, PROFIenergy, prioritized startup
Connectable IO devices	Up to 128 in total; up to 64 with IRT
Open communication	TCP/IP, ISO-on-TCP, UDP, DHCP, DNS, SNMP, DCP, LLDP, Modbus TCP
Web / OPC UA	HTTP and HTTPS web server; OPC UA client and server with applicable runtime license

Mechanical and environmental data

Dimensions	35 x 147 x 129 mm (W x H x D)
Weight	Approximately 336 g
Operating temperature	-30 to 60 C horizontal installation; -30 to 40 C vertical installation; no condensation
Storage / transport	-40 to 70 C
Installation altitude	Up to 5,000 m; restrictions apply above 2,000 m
Engineering	STEP 7 TIA Portal V21 for firmware V4.1; V18 or higher for firmware V3.0
RoHS	Substance-restriction compliance declared since 24 November 2022

Official source references

Siemens product data sheet (10 pages): general and technical data on pages 1-8; Dimensions and Weights on page 8. Open the Siemens product data sheet.

Siemens Equipment Manual, document A5E52295274-AB (11/2023): Technical specifications on pages 57-60, including dimensions and weight. Open the Siemens equipment manual.

Source data verified against the Siemens SiePortal product record for 6ES7511-1TL03-0AB0.