SIEMENS PLC SIMATIC S7-1500CPU 1516TF-3 PN/DP 6ES7516-3UN00-0AB0 PROCESSING UNIT WITH WORK MEMORY

Our Product Introduction

Basic Information

- Place of Origin: Germany
- Brand Name: SIEMENS
- Certification: CE
- Model Number: 6ES7516-3UN00-0AB0
- Minimum Order Quantity: 1
- Price: USD
- Packaging Details: 20,10 x 15,40 x 12,60
- Delivery Time: 10-12Days
- Payment Terms: L/C, T/T
- Supply Ability: 100

Product Specification

Product Description

SIEMENS PLC SIMATIC S7-1500CPU 1516TF-3 PN/DP 6ES7516-3UN00-0AB0 PROCESSING UNIT WITH WORK MEMORY

Product Introduction:
The SIEMENS PLC SIMATIC S7-1500 CPU 1516-3 UN 6ES7516-3UN00-0AB0 is a reliable and versatile central processing unit (CPU) specifically designed for industrial automation applications. It belongs to the SIEMENS SIMATIC S7-1500 series, known for its advanced functionality and high performance.
Product Information and Specifications:
- Model: CPU 1516-3 UN 6ES7516-3UN00-0AB0
The CPU 1516-3 UN features a powerful processor that ensures efficient execution of control programs. It supports multiple programming languages, including ladder logic, function blocks, and structured text, providing flexibility and ease of use for complex control tasks.
In terms of memory capacity, the CPU 1516-3 UN offers sufficient storage space for program and data. While specific details were not provided in the query, typical configurations of the CPU include program memory ranging from 4 MB to 10 MB and data memory ranging from 2 MB to 4 MB. This allows users to store their control programs and necessary data structures for the PLC's operation.
Designed to operate in demanding industrial environments, the CPU 1516-3 UN delivers reliable and precise control for applications such as manufacturing, process control, and machine automation. It supports a variety of communication interfaces, facilitating seamless integration with other devices and systems within the automation network.
The CPU 1516-3 UN is typically programmed and configured using Siemens' TIA Portal (Totally Integrated Automation Portal) software. The TIA Portal provides a comprehensive engineering environment for efficient programming, simulation, and diagnostics, ensuring easy development and maintenance of automation projects.
Product Attributes:
- Model: CPU 1516-3 UN 6ES7516-3UN00-0AB0
- Processor: Powerful processor for efficient control program execution
- Programming Languages: Supports ladder logic, function blocks, and structured text
- Memory Capacity: Sufficient storage space for program and data
- Communication Interfaces: Supports various communication interfaces
- Engineering Software: Programmed and configured using Siemens' TIA Portal
- Suitable for: Manufacturing, process control, and machine automation applications
In summary, the SIEMENS PLC SIMATIC S7-1500 CPU 1516-3 UN 6ES7516-3UN00-0AB0 is a reliable and versatile CPU offering advanced functionality and sufficient memory capacity. It provides efficient and precise control for various industrial processes, making it well-suited for a wide range of industrial automation applications.

General information	
Product type designation	CPU 1516TF-3 PN/DP
HW functional status	FS11
Firmware version	V3.1
● FW update possible	Yes
Product function	
● I&M data	Yes; I&M0 to I&M3
● Isochronous mode	Yes; Distributed and central; with minimum OB 6x cycle of 375 µs (distributed) and 1 ms (central)
● SysLog	Yes
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	V19 (FW V3.1) / V15 (FW V2.5) or higher
Configuration control	
via dataset	Yes
Display	
Screen diagonal [cm]	6.1 cm
Control elements	
Number of keys	6
Mode selector switch	1
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Mains buffering	
● Mains/voltage failure stored energy time	5 ms
● Repeat rate, min.	1/s
Input current	
Current consumption (rated value)	1.2 A
Current consumption, max.	1.5 A
Inrush current, max.	1.9 A; Rated value
I²t	0.4 A²·s

Power	
Infeed power to the backplane bus	12 W
Power consumption from the backplane bus (balanced)	30 W
Power loss	
Power loss, typ.	24 W
Memory	
Number of slots for SIMATIC memory card	1
SIMATIC memory card required	Yes
Work memory	
● integrated (for program)	3 Mbyte
● integrated (for data)	7.5 Mbyte
Load memory	
● Plug-in (SIMATIC Memory Card), max.	32 Gbyte
Backup	
● maintenance-free	Yes
CPU processing times	
for bit operations, typ.	6 ns
for word operations, typ.	7 ns
for fixed point arithmetic, typ.	9 ns
for floating point arithmetic, typ.	37 ns
CPU-blocks	
Number of elements (total)	8 000; Blocks (OB, FB, FC, DB) and UDTs
DB	
● Number range	1 ... 60 999; subdivided into: number range that can be used by the user: 1 ... 59 999, and number range of DBs created via SFC 86: 60 000 ... 60 999
● Size, max.	7.5 Mbyte; For DBs with absolute addressing, the max. size is 64 KB
FB	
● Number range	0 ... 65 535
● Size, max.	1 Mbyte
FC	
● Number range	0 ... 65 535
● Size, max.	1 Mbyte
OB	
● Size, max.	1 Mbyte
● Number of free cycle OBs	100
● Number of time alarm OBs	20
● Number of delay alarm OBs	20
● Number of cyclic interrupt OBs	20; With minimum OB 3x cycle of 250 µs
● Number of process alarm OBs	50
● Number of DPV1 alarm OBs	3
● Number of isochronous mode OBs	3
● Number of technology synchronous alarm OBs	2
● Number of startup OBs	100
● Number of asynchronous error OBs	4
● Number of synchronous error OBs	2
● Number of diagnostic alarm OBs	1
Nesting depth	
● per priority class	24; Up to 8 possible for F-blocks
Counters, timers and their retentivity	
S7 counter	
● Number	2 048
Retentivity	

— adjustable	Yes
IEC counter	
● Number	Any (only limited by the main memory)
Retentivity	
— adjustable	Yes
S7 times	
● Number	2 048
Retentivity	
— adjustable	Yes
IEC timer	
● Number	Any (only limited by the main memory)
Retentivity	
— adjustable	Yes

Dimensions	
Width	175 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	1 929 g