SIEMENS

Data sheet

6ES7155-6AU01-0BN0



SIMATIC ET 200SP, PROFINET interface module IM 155-6PN Standard, max. 32 I/O modules, and 16 ET 200AL modules, single hot swap, incl. server module (6ES7193-6PA00-0AA0)

Product type designation IM 155-6 PN ST HW functional status From FS03 Firmware version From FS03 • FW update possible Yes Product function Yes; I&M0 to I&M3 • I&M data Yes; Single hot swapping • Is&M data Yes; Single hot swapping • Is&M data Yes; Single hot swapping • ISEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP4 and higher • STEP 7 configurable/integrated from version V2.3 / - Configuration control Via dataset via dataset Yes Supply voltage Person Rated value (DC) 24 V permissible range, upper limit (DC) 19 2 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Mains buffering 10 ms Input curront 10 ms Input curront max. 37 A Current consumption, max. 550 mA Inrush current, max. 37 A Power loss 4.5 W Power loss 4.5 W Power loss 4.5 W Power loss 1.9 W Address space per module 256 byte; per input / output<	General information	
Firmware version Yes Product function Yes Product function (8M data Module swapping during operation (hot swapping) (8chtronous mode No Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version V5.5 SP4 and higher V2.3 / - Configuration control V3.5 SP4 and higher V2.3 / - Configuration control version V2.3 / - Rated value (DC) 24 V permissible range, lower limit (DC) 19.2 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes Short-circuit protection Yes Mains/voltage failure stored energy time 10 ms Inrush current Current consumption, max. 10 ms Inrush current, max. 3.7 A Pit 0.09 A*s Power loss 4.5 W	Product type designation	IM 155-6 PN ST
• FW update possible Yes Product function • • I&M data Yes; I&M0 to I&M3 • Module swapping during operation (hot swapping) Yes; Single hot swapping • Isochronous mode No Engineering with • • STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 ton Figurable/integrated from version V5.5 SP4 and higher • PROFINET from GSD version/GSD revision V2.3 / - Configurable/integrated from version V5.5 SP4 and higher • Via dataset Yes Supply voltage	HW functional status	From FS03
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Module swapping during operation (hot swapping) No Isochronous mode No Engineering with STEP 7 TIA Portal configurable/integrated from version V14 STEP 7 configurable/integrated from version V5.5 SP4 and higher V14 V14	Product function	
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Engineering with • STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP4 and higher • PROFINET from GSD version/GSD revision V2.3 / - Configuration control Ves supply voltage Rated value (DC) Permissible range, lower limit (DC) 19.2 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes Mains buffering • • Mains/voltage failure stored energy time 10 ms Input current Current consumption (rated value) Current consumption, max. 550 mA Inrush current, max. 3.7 A Power 0.99 A*.s Power loss 4.5 W Power loss, typ. 1.9 W Address space per module 426 byte; per input / output	 Module swapping during operation (hot swapping) 	Yes; Single hot swapping
• STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP4 and higher • PROFINET from GSD version/GSD revision V2.3 / - Configuration control Via dataset Supply voltage Yes Rated value (DC) 24 V permissible range, lower limit (DC) 19.2 V permissible range, ower limit (DC) 28.8 V Reverse polarity protection Yes Mains buffering 0 • Mains/voltage failure stored energy time 10 ms Input current 20 participation Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A Power 0.99 A²-s Power loss 4.5 W Power loss 4.5 W Power loss 4.5 W Power loss 1.9 W Address space per module 256 byte; per input / output	Isochronous mode	No
version V5.5 SP4 and higher • STEP 7 configurable/integrated from version V5.5 SP4 and higher • PROFINET from GSD version/GSD revision V2.3 / - Configuration control Via dataset via dataset Yes Supply voltage Rated value (DC) Permissible range, lower limit (DC) 19.2 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Short-circuit protection Yes Mains buffering 10 ms Input current 200 mA Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I ⁴ 0.09 A ² ·s Power 1.9 W Address area Address space per module Address space per module 456 byte; per input / output	Engineering with	
PROFINET from GSD version/GSD revision V2.3 / - Configuration control Via dataset Yes 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 Short-circuit protection Yes Mains buffering • Mains/voltage failure stored energy time 10 ms Input current Current consumption, max. 550 mA Inrush current, max. 3.7 A IPt 0.09 A ² ·s Power loss Power loss Power loss, typ. 1.9 W Address space per module • Address space per module • Address space per module • Address space per module, max. 256 byte; per input / output		V14
Configuration control Via dataset Yes Supply voltage 24 V Partial value (DC) 24 V permissible range, lower limit (DC) 19.2 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Short-circuit protection Yes Mains buffering 0 ms Input current 10 ms Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I ¹ t 0.09 A ² ·s Power 1.9 W Address space per module 4.5 W Power loss 256 byte; per input / output	 STEP 7 configurable/integrated from version 	V5.5 SP4 and higher
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permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Short-circuit protection Yes Mains buffering 10 ms • Mains/voltage failure stored energy time 10 ms Input current 250 mA Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I²t 0.09 A²·s Power Infeed power to the backplane bus 4.5 W 4.5 W Power loss, typ. 1.9 W Address space per module 4256 byte; per input / output	Rated value (DC)	24 V
Reverse polarity protection Yes Short-circuit protection Yes Mains buffering 10 ms Input current 10 ms Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I²t 0.09 A²·s Power 450 W Power loss 4.5 W Power loss, typ. 1.9 W Address space per module 426 byte; per input / output	permissible range, lower limit (DC)	19.2 V
Short-circuit protection Yes Mains buffering 10 ms Input current 10 ms Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I ^a t 0.09 A ² ·s Power Infeed power to the backplane bus 4.5 W Power loss 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	permissible range, upper limit (DC)	28.8 V
Mains buffering 10 ms Input current 10 ms Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I²t 0.09 A²·s Power Infeed power to the backplane bus Infeed power to the backplane bus 4.5 W Power loss 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	Reverse polarity protection	
Mains/voltage failure stored energy time 10 ms Input current Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I*t 0.09 A*-s Power Infeed power to the backplane bus 4.5 W Power loss Power loss Power loss, typ. 1.9 W Address area Address space per module Address space per module, max. 256 byte; per input / output	Short-circuit protection	Yes
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Current consumption (rated value) 450 mA Current consumption, max. 550 mA Inrush current, max. 3.7 A I²t 0.09 A²·s Power Infeed power to the backplane bus Infeed power to the backplane bus 4.5 W Power loss Power loss Power loss, typ. 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	 Mains/voltage failure stored energy time 	10 ms
Current consumption, max. 550 mA Inrush current, max. 3.7 A I²t 0.09 A²·s Power Infeed power to the backplane bus Infeed power to the backplane bus 4.5 W Power loss Power loss Power loss typ. 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	Input current	
Inrush current, max. 3.7 A I²t 0.09 A²·s Power Infeed power to the backplane bus Infeed power to the backplane bus 4.5 W Power loss 4.5 W Power loss 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	Current consumption (rated value)	450 mA
I²t 0.09 A²·s Power Infeed power to the backplane bus Infeed power to the backplane bus 4.5 W Power loss 4.5 W Power loss 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	Current consumption, max.	550 mA
Power Infeed power to the backplane bus 4.5 W Power loss Power loss, typ. Power loss, typ. 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	Inrush current, max.	3.7 A
Infeed power to the backplane bus 4.5 W Power loss 1.9 W Address area 1.9 W Address space per module 256 byte; per input / output	l²t	0.09 A ² ·s
Power loss 1.9 W Address area Address space per module Address space per module, max. 256 byte; per input / output	Power	
Power loss, typ. 1.9 W Address area Address space per module • Address space per module, max. 256 byte; per input / output	Infeed power to the backplane bus	4.5 W
Address area Address space per module • Address space per module, max. 256 byte; per input / output	Power loss	
Address space per module 256 byte; per input / output	Power loss, typ.	1.9 W
Address space per module, max. 256 byte; per input / output	Address area	
	Address space per module	
Address space per station	Address space per module, max.	256 byte; per input / output
	Address space per station	

 Address space per station, max. 	512 byte; Dependent on configuration
Hardware configuration	
Rack	
Quantity of operable ET 200SP modules, max.	32
Quantity of operable ET 200AL modules, max.	16
Submodules	10
Number of submodules per station, max.	256
	230
Interfaces	4. O mente (autitale)
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
Number of ports	2
 integrated switch 	Yes
BusAdapter (PROFINET)	Yes; compatible BusAdapters: BA 2x RJ45, BA 2x FC, BA 2x M12
Protocols	
PROFINET IO Device	Yes
 Open IE communication 	Yes
Media redundancy	Yes; PROFINET MRP
Interface types	
RJ 45 (Ethernet)	
 Transmission procedure 	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
 Autonegotiation 	Yes
Autocrossing	Yes
Protocols	
PROFINET IO Device	
Services	
— IRT	Yes; with send cycles of between 250 μ s and 4 ms in increments of 125
	μs
— PROFlenergy	Yes
 Prioritized startup 	Yes
— Shared device	Yes
 — Number of IO Controllers with shared device, 	2
max.	
Redundancy mode	Na
PROFINET system redundancy (S2)	No
Media redundancy	Vez
- MRP	Yes
— MRPD	No
Open IE communication	
	Yes
• SNMP	Yes
• LLDP	Yes
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED • RUN LED	Voe: groon LED
• ERROR LED	Yes; green LED Yes; red LED
AAINT LED	Yes; Yellow LED
Monitoring of the supply voltage (PWR-LED) Connection display LINK TY/RY	Yes; green PWR LED
Connection display LINK TX/RX	Yes; 2x green link LEDs on BusAdapter
Potential separation	AL.
between backplane bus and electronics	No
between PROFINET and all other circuits	Yes; 1500 V AC (type test)
between supply and all other circuits	No
Permissible potential difference	

between different circuits	Safety extra low voltage SELV
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Network loading class	2
Security level	According to Security Level 1 Test Cases V1.1.1
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	0 °C
 horizontal installation, max. 	60 °C
 vertical installation, min. 	0 °C
 vertical installation, max. 	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m
Connection method	
ET-Connection	
 via BU/BA Send 	Yes; + 16 ET 200AL modules
Dimensions	
Width	50 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	147 g; without BusAdapter
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