## **SIEMENS**

## **Data sheet**

## 6ES7155-6AU01-0CN0



SIMATIC ET 200SP, PROFINET, 2-port interface module IM 155-6PN/2 High Feature, 1 slot for BusAdapter, max. 64 I/O modules and 16 ET 200AL modules, S2 redundancy, multi-hotswap, 0.25 ms, isochronous mode, optional PN strain relief, including server module

Product type designation  HV functional status  From FS02  Firmware version  FW update possible  Product function  IM 155-6 PN/2 HF  FW update possible  Product function  IM 42  Product function  IM 42  Product function  IM 42  Product function  Product function  IM 43  Product function  Product function  Product function  IM 43  Product function  Proside function  Proside function  Proside function and locking unit  Product function and docking unit  Product function  Produ
Firmware version Firmware version Firmware version Firmware possible Froduct function Frodu
FW update possible  Product function  I &M data  Module swapping during operation (hot swapping)  I sochronous mode  Tool changer  Tool changer  Fagineering with  STEP 7 TIA Portal configurable/integrated from version  Tone STEP 7 configurable/integrated from version  PROFINET from GSD version/GSD revision  Configuration control  via dataset  Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Ainsubstraing  Mains buffering  Mains Voltage failure stored energy time  Input current  Current consumption, max.  700 mA  Inrush current, max.  700 mA  Inrush current, max.
Product function  IsM data  Module swapping during operation (hot swapping)  Stochronous mode  Tool changer  Pes; Docking station and docking unit  Engineering with  STEP 7 TIA Portal configurable/integrated from version  FROFINET from GSD version/GSD revision  PROFINET from GSD version/GSD revision  Configuration control  via dataset  Yes  Supply voltage  Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Short-circuit protection  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  Too mA  Inrush current, max.
Is Module swapping during operation (hot swapping) Module swapping during operation (hot swapping) Isochronous mode Tool changer Tool changer  STEP 7 TIA Portal configurable/integrated from version STEP 7 ton figurable/integrated from version Tonfigurable via GSD file STEP 7 configurable/integrated from version STEP 7 configurable/integrated from version STEP 7 configurable/integrated from version STEP 7 configurable via GSD revision  Configuration control  Via dataset Yes  Supply voltage  Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permissible range, upper limit (DC) Stort-circuit protection Yes  Short-circuit protection Yes  Mains buffering Mains buffering Mains/voltage failure stored energy time 10 ms  Input current  Current consumption, max. 700 mA  Inrush current, max. 4.5 A
Module swapping during operation (hot swapping) Isochronous mode Tool changer Yes; Docking station and docking unit  Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFINET from GSD version/GSD revision  Configuration control  via dataset Yes  Supply voltage  Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Short-circuit protection Yes  Mains buffering Mains/voltage failure stored energy time Input current  Current consumption, max. Inrush current, max.  Yes  Nocking station and docking unit Yes; Multi-hot swapping Yes; Docking station and docking unit  Engineering yes; Docking station and docking unit  V15.1  Configurable via GSD file GSDML V2.34  Configurable via GSD file SSDML V2.34  Ves  Supply voltage  19.2 V  Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permiss
Isochronous mode Tool changer Tool changer Tool changer Yes; Docking station and docking unit  Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFINET from GSD version/GSD revision  Configuration control Via dataset Yes  Supply voltage  Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Short-circuit protection Yes  Mains buffering Mains/voltage failure stored energy time Input current  Current consumption, max.  Inrush current, max.  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
Tool changer  Engineering with  STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFINET from GSD version/GSD revision  Configuration control via dataset Yes  Supply voltage  Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Short-circuit protection Mains buffering Mains/voltage failure stored energy time Input current Current consumption, max.  Inrush current, max.  V15.1 Configuration and docking unit Yes; Docking station and docking unit Y15.1 Configurable via GSD file GSDML V2.34  V15.1 Configurable via GSD file GSDML V2.34  Ves SUML V2.34  Ves Supply voltage  24 V Permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes Short-circuit protection Yes Mains buffering No mA
Engineering with  STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFINET from GSD version/GSD revision  GSDML V2.34  Configuration control  via dataset Yes  Supply voltage  Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Yes  Short-circuit protection Yes  Mains buffering Mains/voltage failure stored energy time  Input current  Current consumption, max. Inrush current, max.  V15.1  V15.1  V15.1  V15.1  V15.1  V15.1  Ves  SDML V2.34  Ves  Supply voltage Ves  Ves  Ves  Ves  Ves  Non-circuit protection Yes  Mains/voltage failure stored energy time Ves  Non-circuit protection Ves  National Protection Ves  Non-circuit consumption, max. Voltage failure stored energy time Verent consumption, max. Voltage Verent Value
STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFINET from GSD version/GSD revision  Configuration control  via dataset Yes  Supply voltage  Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Yes  Short-circuit protection Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  700 mA  Inrush current, max.
STEP 7 configurable/integrated from version PROFINET from GSD version/GSD revision  Configuration control via dataset Yes  Supply voltage  Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Short-circuit protection Yes  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max. Inrush current, max.  Configurable via GSD file GSDML V2.34   Configurable via GSD file GSDML V2.34  Yes  Supply voltage  Yes  10 ms  10 ms  700 mA  4.5 A
PROFINET from GSD version/GSD revision  Configuration control  via dataset  Yes  Supply voltage  Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Short-circuit protection  Yes  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  Syes  Yes  GSDML V2.34  Yes  10 Ms
via dataset  Supply voltage  Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Yes  Short-circuit protection  Yes  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  Yes  700 mA
via dataset  Supply voltage  Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Yes  Short-circuit protection  Yes  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  Yes  Yes  10 ms  700 mA
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. 700 mA Inrush current, max. 4.5 A
Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Short-circuit protection  Yes  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  24 V  24 V  28 N  19.2 V  28.8 V  708  Yes  Mans/voltage failure stored energy time  10 ms  10 ms  11 ms  12 ms  13 ms  14 ms  15 ms  16 ms
permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Short-circuit protection  Yes  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  19.2 V  19.2
permissible range, upper limit (DC)  Reverse polarity protection  Short-circuit protection  Yes  Mains buffering  • Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  28.8 V  Yes  10 ms  10 ms  4.5 A
Reverse polarity protection  Short-circuit protection  Yes  Mains buffering  Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  Yes  10 ms  700 mA  4.5 A
Short-circuit protection  Mains buffering  Mains/voltage failure stored energy time  10 ms  Input current  Current consumption, max.  Inrush current, max.  700 mA  4.5 A
Mains buffering  ■ Mains/voltage failure stored energy time  Input current  Current consumption, max.  Inrush current, max.  4.5 A
Mains/voltage failure stored energy time     10 ms  Input current  Current consumption, max.  700 mA  Inrush current, max.  4.5 A
Input current  Current consumption, max. 700 mA  Inrush current, max. 4.5 A
Current consumption, max. 700 mA Inrush current, max. 4.5 A
Inrush current, max. 4.5 A
l²t 0.25 A²-s
Power loss
Power loss, typ. 2.4 W
Address area
Address space per module
Address space per module, max.     288 byte; For input and output data respectively
Address space per station
Address space per station, max.     1 440 byte
Hardware configuration
Rack
Quantity of operable ET 200SP modules, max.     64
Quantity of operable ET 200AL modules, max.
Submodules

Number of submodules per station, max.	256
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes
<ul> <li>Number of ports</li> </ul>	2; via BusAdapter
<ul><li>integrated switch</li></ul>	Yes
BusAdapter (PROFINET)	Yes; BA 2x RJ45, BA 2x FC, BA 2x SCRJ, BA SCRJ/RJ45, BA SCRJ/FC, BA 2x LC, BA LC/RJ45, BA LC/FC
Protocols	
<ul> <li>PROFINET IO Device</li> </ul>	Yes
Open IE communication	Yes
Media redundancy	Yes; PROFINET MRP
PROFINET IO Device	
Services	
— IRT	Yes; 250 µs to 4 ms in 125 µs frame
— PROFlenergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
<ul> <li>Number of IO Controllers with shared device, max.</li> </ul>	4
nterface types	
RJ 45 (Ethernet)	
Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
<ul> <li>Autonegotiation</li> </ul>	Yes
<ul> <li>Autocrossing</li> </ul>	Yes
Protocols	
Modbus TCP	No
Number of connections	
<ul> <li>Number of MtM communication relationships/connections, max.</li> </ul>	16
Redundancy mode	
<ul> <li>PROFINET system redundancy (S2)</li> </ul>	Yes; NAP S2
H-Sync forwarding	Yes
Media redundancy	
— MRP	Yes
— MRPD	No
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
sochronous mode	
Equidistance	Yes
shortest clock pulse	250 µs
max. cycle	4 ms
Bus cycle time (TDP), min.	250 µs
Jitter, max.	1 µs
nterrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
• RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
MAINT LED	Yes; Yellow LED
Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
Connection display LINK TX/RX	Yes; 2x green link LEDs on BusAdapter
Potential separation	. 30, 1/2 groot min 1200 on buo taptor
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	3
Ambient conditions	
Ambient temperature during operation	
<ul> <li>horizontal installation, min.</li> </ul>	-30 °C; No condensation
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
<ul> <li>vertical installation, min.</li> </ul>	-30 °C; No condensation
<ul> <li>vertical installation, max.</li> </ul>	50 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
connection method	
ET-Connection	
• via BU/BA Send	Yes; + 16 ET 200AL modules
Mechanics/material	
Strain relief	Yes; Optional
Dimensions	
Width	50 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	120 g; without BusAdapter

8/7/2023

last modified: