



SIMATIC ET 200SP, PROFINET interface module IM 155-6PN Basic, Max. 12 I/O modules, 2x integrated RJ45 sockets incl. server module

General information	
Product type designation	IM 155-6 PN BA
HW functional status	from FS04
Firmware version	
• 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	V13 SP1
• STEP 7 configurable/integrated from version	V5.5 SP4 and higher
• 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
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	300 mA
I ² t	0.09 A ² ·s
Power loss	
Power loss, typ.	1.8 W
Address area	
Address space per module	
• Address space per module, max.	32 byte; per input / output
Address space per station	
• Address space per station, max.	32 byte; per input / output
Hardware configuration	
Rack	
• Quantity of operable ET 200SP modules, max.	12
• Quantity of operable ET 200AL modules, max.	0
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)

1. Interface

Interface types

- | | |
|-------------------------|------------------------------|
| • RJ 45 (Ethernet) | Yes; 2 integrated RJ45 ports |
| • Number of ports | 2 |
| • integrated switch | Yes |
| • BusAdapter (PROFINET) | No |

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) |
| • 10 Mbps | No |
| • 100 Mbps | Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) |
| • Autonegotiation | Yes |
| • Autocrossing | Yes |

Protocols

PROFINET IO Device

Services

- | | |
|-----------------------|----|
| — IRT | No |
| — PROFIenergy | No |
| — Prioritized startup | No |
| — Shared device | No |

Redundancy mode

- | | |
|-----------------------------------|----|
| • PROFINET system redundancy (S2) | No |
|-----------------------------------|----|

Media redundancy

- | | |
|--------|-----|
| — MRP | Yes |
| — MRPD | No |

Open IE communication

- | | |
|----------|-----|
| • TCP/IP | Yes |
| • SNMP | Yes |
| • LLDP | Yes |

Isochronous mode

- | | |
|--------------|----|
| Equidistance | No |
|--------------|----|

Interrupts/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

- | | |
|---------------------------------------|----|
| between backplane bus and electronics | No |
|---------------------------------------|----|

- | | |
|---|-----|
| between PROFINET and all other circuits | Yes |
|---|-----|

- | | |
|---------------------------------------|----|
| between supply and all other circuits | No |
|---------------------------------------|----|

Standards, approvals, certificates

- | | |
|-----------------------|---|
| Network loading class | 2 |
|-----------------------|---|

Ambient conditions

Ambient temperature during operation

- | | |
|---------------------------------|--------|
| • horizontal installation, min. | -30 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | -30 °C |
| • vertical installation, max. | 50 °C |

Altitude during operation relating to sea level

- | | |
|---|--|
| • Installation altitude above sea level, max. | 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual |
|---|--|

connection method / header	
ET-Connection	
• via BU/BA Send	No
Dimensions	
Width	35 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	125 g
last modified:	3/2/2021 