



SIMATIC PN/MF coupler multi-fieldbus coupler, PN IO, EtherNet/IP, for deterministic data exchange between max. 1 controller per side, redundant current infeed, Ethernet connection via SIMATIC BusAdapter (BA), supplied without BusAdapter

General information	
Product type designation	PN/MF coupler
Firmware version	V5.0.1
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	Yes
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0604H
Manufacturer ID according to ODVA (VendorID)	04E3H
Device ID according to ODVA (Product code)	0FA0H
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
<ul style="list-style-type: none"> <li>Isochronous mode</li> </ul>	No
<ul style="list-style-type: none"> <li>Tool changer</li> </ul>	Yes; Docking station and docking unit
<ul style="list-style-type: none"> <li>Local coupling, IO data</li> </ul>	No
<ul style="list-style-type: none"> <li>Local coupling, data records</li> </ul>	No
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V16 or higher via HSP of PN/PN coupler V4.2 or higher in compatibility mode
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	Configurable via GSD file
<ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>	V2.3
Installation type/mounting	
Mounting	Mounting rail 7.5 mm and 15 mm
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	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	10 ms
Input current	
Current consumption, max.	360 mA; for 19.2 V input voltage at the right-hand supply terminal, including 2 plugged BA
Inrush current, max.	1.6 A
I <sup>2</sup> t	0.031 A <sup>2</sup> ·s
from supply voltage 1L+, max.	320 mA; for 19.2 V input voltage at the left-hand supply terminal, including 2 plugged BA
Power loss	
Power loss, typ.	4 W; For 24 V input voltage and 2 plugged BA 2x RJ45 If BusAdapters with an optical interface are plugged, there is an additional 750 mW per optical interface (3 W with 2 plugged BA 2x LC)
Address area	
Address space per module	
<ul style="list-style-type: none"> <li>Address space per module, max.</li> </ul>	254 byte; max. 254 bytes of input data and 253 bytes of output data

<b>Address space per station</b>	
• Address space per station, max.	1 440 byte; per input / output
<b>Hardware configuration</b>	
<b>Submodules</b>	
• Number of submodules per station, max.	116
<b>Interfaces</b>	
Number of PROFINET interfaces	2; One PROFINET interface per line side
Optical interface	No
<b>1. Interface</b>	
<b>Interface types</b>	
• Number of ports	2; via BusAdapter
• integrated switch	Yes
• BusAdapter (PROFINET)	Yes; compatible BusAdapters: BA 2x RJ45, BA 2x FC, BA 2x M12
<b>Protocols</b>	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; as MRP client, maximum of 50 nodes in the ring
<b>2. Interface</b>	
<b>Interface types</b>	
• Number of ports	2; via BusAdapter
• integrated switch	Yes
<b>Protocols</b>	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; as MRP client, maximum of 50 nodes in the ring
<b>Interface types</b>	
<b>RJ 45 (Ethernet)</b>	
• 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
<b>Protocols</b>	
Supports protocol for PROFINET IO	Yes
Modbus TCP	No
<b>Protocols (Ethernet)</b>	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
• ping	Yes
• ARP	Yes
<b>PROFINET IO Device</b>	
<b>Services</b>	
— IRT	No
— PROFlenergy	No
— Prioritized startup	Yes
— Shared device	No
<b>Redundancy mode</b>	
• PROFINET system redundancy (S2)	Yes; NAP S2 acc. to IEC
<b>Media redundancy</b>	
— MRP	Yes
— MRPD	No
<b>EtherNet/IP</b>	
<b>Services</b>	
— CIP Implicit Messaging	Yes
— CIP Explicit Messaging	Yes
— CIP Safety	No
<b>Updating times</b>	
— Requested Packet Interval (RPI)	2 ms
<b>Address area</b>	

— Address space per module, max.	244 byte; (244 byte outputs / 244 byte inputs)
— ForwardOpen (Class1 & 32 bit Header)	500 byte; (496 byte outputs / 500 byte inputs)
— LargeForwardOpen (Class3)	4 002 byte
<b>Open IE communication</b>	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes; Parameterizable
<b>Diagnostics indication LED</b>	
• RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
• MAINT LED	Yes; Yellow LED
• LINK LED	Yes; 2x green link LEDs on BusAdapter
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• NS LED	Yes; green/red LED
• MS LED	Yes; green/red LED
• IO LED	Yes; red-green-yellow LED
<b>Potential separation</b>	
between supply voltage and electronics	Yes; to power input 2
between Ethernet and electronics	Yes
<b>Isolation</b>	
Isolation tested with	707 V DC (type test)
<b>Standards, approvals, certificates</b>	
network separator in accordance with IEC 61784-3-3	Yes
Network loading class	3
<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	-30 °C; No condensation
• max.	60 °C; = Tmax for horizontal installation; for vertical installation Tmax = 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 section "Climatic and mechanical environmental conditions"
<b>Mechanics/material</b>	
Strain relief	Yes; Optional, for RJ45 and FC BusAdapter only
<b>Dimensions</b>	
Width	100 mm
Height	117 mm
Depth	74 mm; with mounting rail
<b>Weights</b>	
Weight, approx.	200 g; without BusAdapter
<b>last modified:</b>	3/2/2021 