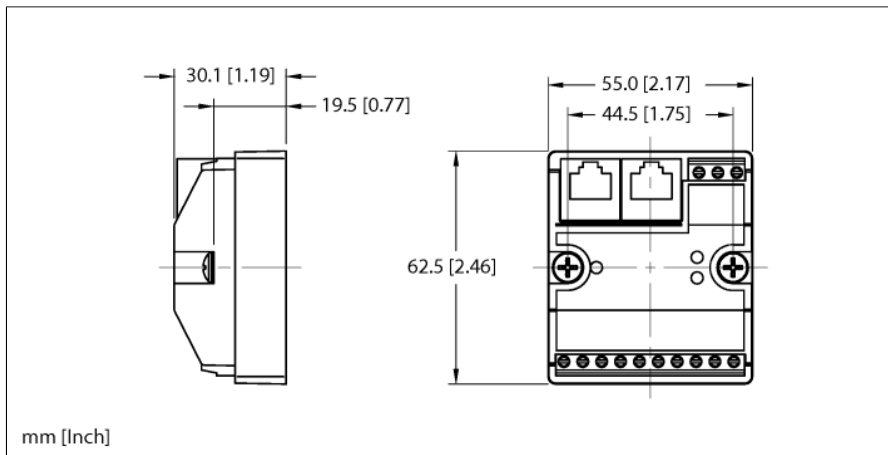


Compact IP20 Multiprotocol I/O Station

4 IO-Link Master Channels

FEN20-4IOL



- Glass fiber reinforced housing
- Shock and vibration tested
- Fully potted module electronics
- Protection classes IP65, IP67, IP69K

ID	6814140
Supply	
Supply voltage	24 VDC
Admissible range	20.4...28.8 VDC
System power supply	Supply from V1, class 2 power source required
Voltage supply connection	Screw terminals
Operating current	100
Sensor/actuator supply	Supply of terminals V1+1...V1+4 from V1+, 1 A per terminal. Total current max. 4 A
Electrical isolation	500V Galvanic Zone-Zone and Zone-Ethernet
Power dissipation, typical	≤ 2.4 W
System data	
Transmission rate Ethernet	10/100 Mbps, Full/Half Duplex, Auto Negotiation, Auto Cross
Fieldbus connection technology	Screw terminals, (Power and I/O)
Terminal cross-section	0.2...1.5 mm ² (AWG: 26...14)
Tightening torque	0.5 Nm
Connection technology Ethernet	2 × RJ45
Fieldbus address range	0 (192.168.1.254)
Protocol detection	automatic
Web server	192.168.1.254 (Default)
Service interface	Ethernet
Field Logic Controller (FLC)	
ARGEES Firmware Version	1.2.0.0
ARGEES Engineering Version	1.0.10.0
Modbus TCP	
Addressing	Static IP, BOOTP, DHCP
Supported function codes	FC1, FC2, FC3, FC4, FC5, FC6, FC15, FC16, FC23
Number of TCP connections	6
Input register start address	0 (0x0000 hex)
Output register start address	2048 (0x0800 hex)

Ethernet/IP	
Addressing	acc. to EtherNet/IP specification
Quick Connect (QC)	< 400 ms
Device Level Ring (DLR)	supported
Class 1 connections (CIP)	6
Input Assembly Instance	103
Output Assembly Instance	104
Configuration Assembly Instance	106

PROFINET	
Addressing	DCP
Conformance class	B (RT)
MinCycleTime	1 ms
Fast Start-Up (FSU)	< 150 ms
Diagnostics	acc. to PROFINET alarm handling
Topology detection	supported
Automatic addressing	supported
Media Redundancy Protocol (MRP)	supported

CC-Link	
Interface	CC-Link IE Field Basic
Type	Intelligent device station
Message Transmission	Yes
Profile specification	CSP+
Max. occupied stations	4
IP change mechanism	Yes
Acyclic SLMP communication	Yes

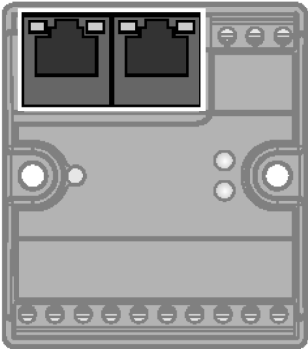
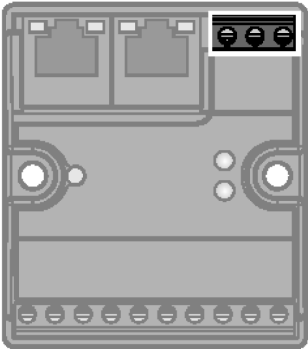
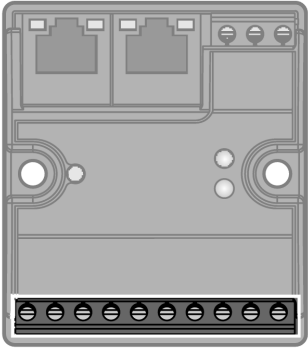
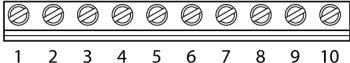
Digital inputs	
Number of channels	4 from C/Q
Input type	PNP
Input delay	2.5 ms

Digital outputs	
Number of channels	4 from C/Q
Output type	PNP
Output current per channel	400 mA max.
Short-circuit protection	yes

IO-Link	
Number of channels	4
IO-Link specification	V 1.1
IO-Link port type	Class A
Frame type	Supports all specified frame types
Supported devices	Max. 32 bytes in/32 bytes out per port
Transmission rate	4.8 kbps (COM 1) / 38.4 kbps (COM 2) / 230 kbps (COM 3)

Standard/Directive conformity	
Vibration test	Acc. to IEC 60068-2-6
Shock test	acc. to IEC 60068-2-27
Approvals and certificates	cULus, contamination level 2, class 2 power supply required

General Information	
Dimensions (W x L x H)	55 x 62.5 x 30 mm
Ambient temperature	-25...+70 °C
Storage temperature	-40...+85 °C
Altitude	Max. 5000 m
Protection class	IP20
MTTF	425 years acc. to SN 29500 (Ed. 99) 20 °C
Housing material	Fiber-glass reinforced Polyamide (PA6-GF30)
Housing color	Black
Tightening torque fixing screw	Screw terminals = max. 0.5 Nm

	Ethernet	RJ45 Ethernet  1 = TX + 2 = TX - 3 = RX + 4 = n.c. 5 = n.c. 6 = RX - 7 = n.c. 8 = n.c.
	Power Supply Recommended torque for screw terminals: 0.5 Nm (4.43 lb.in)	Power Supply  1 = $\oplus$ 2 = V1- 3 = V1+
	I/O Channels Recommended torque for screw terminals: 0.5 Nm (4.43 lb.in) V1+,...V1+, configurable as on, switchable or off	Terminal Connection  1 = V1- 2 = C/Q 1 3 = V1+ 1 4 = C/Q 2 5 = V1+ 2 6 = C/Q 3 7 = V1+ 3 8 = C/Q 4 9 = V1+ 4 10 = V1-

Module Status LED

LED	Color	Status	Description
ETH1 / ETH2	Green	ON	Ethernet Link (100 Mbps)
		Flashing	Ethernet communication (100 Mbps)
	yellow	ON	Ethernet Link (10 Mbps)
		Flashing	Ethernet communication (10 Mbps)
		OFF	No Ethernet link
BUS	Green	ON	Active connection to a master
		Flashing	Ready
		Flashes 3x (1 Hz)	ARGE program running
	Red	ON	IP address conflict or status word is active
		Flashing	Blink/Wink command active
ERR	OFF	Power off	
	Green	ON	Diagnostics disabled
	Red	ON	Short circuit Wrong or Missing Device

Accessories

Type code	Ident-No.		Dimension drawing
FDN20-BKT-DIN	Z0076	Mounting adapter for mounting of 8-channel Fxx20 modules on DIN rail (TS 35)	