

Minebea Intec PR5220 Ethernet Transmitter

Specifications

Housing:

Housing IP20 according to DIN 40050
Mounting on DIN Rail 35 mm according to DIN 46277
Material: polyamide RoHS conform

Dimensions:

Version 00 (W x D x H): 3.9 x 4.6 x 1.77 in
(99 x 116 x 45 mm)
Versions 01, 04, 06, 07 (W x D x H): 3.9 x 4.6 x 2.68 in
(99 x 116 x 68 mm)

Supply Voltage:

24 VDC, ±20%

Power Consumption:

6 W / 8 W (Versions /01, /04, /06, /07)

Control Outputs:

Quantity: 3 opto-isolated output, passive
Voltage: max. 30 VDC
Current: max. 30 mA
Functions: Limits, weight status

Control Inputs:

Quantity: 3, opto-isolated input, passive
Functions: zero setting, taring
Voltage: max. 30 VDC
Current: max. 10 mA

In-Output:

All I/O circuits fully galvanically isolated from sensor input and supply.

Load Cell Connection:

All strain gauge load cells; 6- or 4-wire connection

Load Cell Supply:

12 V, short-circuit proof, external load cell supply possible

Minimum Load Impedance:

Min. 75 Ω e.g. 6 load cells with 600 Ω or 4 load cells with 350 Ω

Measuring Principle:

Measuring amplifier: Delta-Sigma converter
Measuring time: min 5 ms - max. 1600 ms

Input Range:

7.5 mV (appr. 4.8 Mio. div.), usable resolution: 0.2 μV/div

Input Signal:

Measuring signal: 0 to 36 mV (for 100 % nominal load)

W and M Approval (in preparation):

10,000 e class III acc. to EN 45501; according to OIML R76, min. verification interval: 0.5 μV/e

Linearity:

< 0.002 %

Temperature Effects:

Zero: TK0 m < 0.02 μV/K RTI
Span: TKspan < +/- 2 ppm/K

Digital Filter for Load Cell:

4th order (low pass), Bessel, aperiodic or Butterworth

Ethernet Interface (functions):

Ethernet IP and Modbus/TCP
Definition of an IP address: – AutoIP; – DHCP Server classification; – manual entering of an IP address
Automatic detection of signal transmission and corresponding change over (cross-over or patch cable)
Webservice via SOAP/UPnP (Simple Object Access Protocol)
Synchronous Modbus UDP

Status Indicator:

Status LEDs to signal operation and error conditions

Analogue Output:

0 to 10 or 4-20 mA, internal resolution 16-bit, usable step-width: 0.5 μA max. load 500 Ω; user configurable

Serial Interfaces:

RS422/485 via screw terminals
Protocol: Remote display, SMA and Minebea digital scales (XBPI-protocol)



The PR5220 Ethernet transmitter sets new standards in process instrumentation. The standard Ethernet TCP/IP interface enables easy transmission of information to super ordinate systems.

Specifications (cont.)

Electrical Connections:

All electrical connections via modular screw terminals for 2.5 mm² max. System Phoenix/COMBICO

Temperature:

WandM: -10°C to 40°C
Operation: -10°C to 50°C
Storage: -40°C to 70°C

Weight:

Version 00:
Net: 0.29 kg
Versions 01, 04, 06, 07:
Net: 0.35 kg

Standard Features PR5220

- Configuring via VNC
- OPC server
- Full digital signal processing with up to 4.8 Mio divisions internal resolution
- SmartCalibration feature for fast calibration even without weights
- Requires voltage supply of 24 VDC
- IP20 Housing, DIN Rail Mount
- Verifiable with remote display up to 10,000 e, C1 III (EN 45501, OIML R76)
- Precision analog output
- Serial RS-485/422 interface
- CD supplied with software suite
- 10,000 divisions at six samples per second

Part Number/Price

Part #	Type	Minebea Part #	Description	Price
158856	PR5220/00	9405 152 20001	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA	\$1,575.00
158857	PR5220/01	9405 152 20011	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with Profibus DP	\$1,895.00
158858	PR5220/04	9405 152 20041	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with DeviceNet	\$1,895.00
158859	PR5220/06	9405 152 20061	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with ProfiNet	\$1,895.00
158891	PR5220/07	9405 152 20071	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with EtherNet IP	\$1,895.00