

# 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, tuning  
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/d

### Input Signal:

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

### W & 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 cor-  
responding 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:



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.)

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)

### Electrical Connections:

All electrical connections via modular screw terminals for 2.5 mm<sup>2</sup> 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

- 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 supply voltage of 24 VDC
- IP20 housing, DIN Rail Mount
- Verifiable with remote display up to 10,000 e, CL 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	940515220003	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA	\$1,614.00
158857	PR5220/01	940515220013	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with Profibus DP	\$1,942.00
158858	PR5220/04	940515220043	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with DeviceNet	\$1,942.00
158859	PR5220/06	940515220063	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with ProfiNet	\$1,942.00
158891	PR5220/07	940515220073	PR5220 Ethernet Transmitter TCP/IP, 4-20 mA with EtherNet IP	\$1,942.00