

# PENKO ENGINEERING B.V.

Optimising Precision Weighing



1020 Indicator

# PENKO Engineering B.V.

## SGM1020 Digitizer Characteristics

### Your best solution for silo and platform weighing

The 1020 high performance Indicator is an innovative Indicator adaptable to a wide range of weighing applications. Precise and fast measurement of platforms, silos, packing scales, check weighing scales and batching systems are easily achieved. High speed A/D conversion rates allow top performance and accuracy for your applications. Unique color display for easy and comfortable operation. Revolutionary digital filters (compared to conventional filters) significantly improve machine speed.

Various industrial communication protocols enable users to build up sophisticated weighing systems within an overall PLC process control system. The 1020 indicator is available ex stock and can be delivered with a very short lead time.

#### Fast and easy setup

- Ultra-clear visual information at your fingertips
- High-resolution 2,8 inch color TFT screen

#### More flexibility & functionality while saving space

- Time-saving, G-Cal™ technology (Geographical Calibration), expect for the 1020 FMD, for fast and accurate calibration without using weights anywhere on the planet.
- Compact housing with standard built in 3 DI and 4 DO.
- Plug & Play solutions for Filling, Check Weighing, Belt Weighing and Force Measurement.

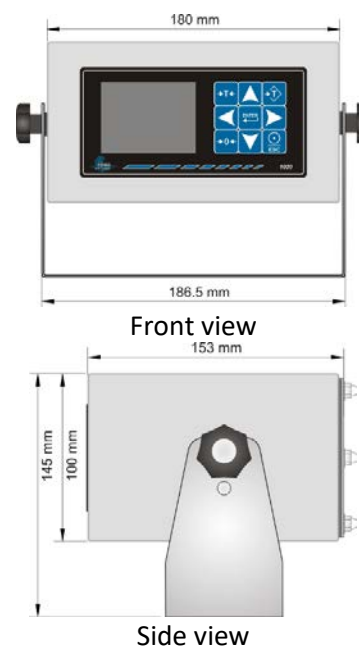
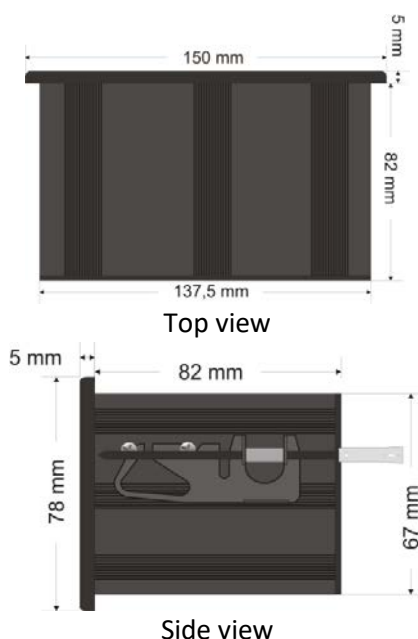
#### Speaks the language of your device

- RS232, RS422, Ethernet, USB, CAN interface and optional Profibus or Profinet.
- Various industrial protocols like Ethernet IP, Modbus TCP, Modbus RTU, FINS and optional Profibus DP, or Profinet.
- Communicates conveniently via remote devices

#### High performance

- 1600 samples per second
- 24 bit internal resolution
- 100 000 parts display resolution

## SGM1020 Digitizer Dimensions



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## 1020 Specifications

Type	Standard	RS232/RS422/ CANBUS	Profibus	Profinet	Stainless steel encloser
Wiring	With sense				
Type of sense	Passive				
Power supply	18-32 Vdc; 7,5 W max.				
Load cell power supply	5 Vdc				
Sensitivity	0,1 μV/d (non-certified)/ 0,4 μV/d (certified)				
Selectable ranges	1; 1,5; 2; 2,5; 3 mV/V				
Input voltage Unipolar @ 3mV/V (not present in Force)	-1 mV to +16 mV				
Input voltage Bipolar @ 3mV/V	-16 mV to +16 mV				
A/D Conversion speed	1600/s				
Max. load cell impedance	1200 Ω				
Min. Load cell impedance	43,75 Ω				
Max. no. of load cells	350 Ω	8			
	1000 Ω	22			
Max. number of d	10.000				
Display resolution	100.000				
Internal resolution	24 bits				
Display steps	1,2,5,10,20,50,100,200				
Display size	2,8"; 320 x 240 pixels				
Inputs, 3 (Force no count)	18-28Vdc, PNP or NPN or count ≤2,5kHz				
Outputs, 4	Max. 35V/0,5A, PNP or NPN				
Analog output (optional)	0/4-20/24mA, 10.000d				
Communication	RS232	No	Yes	No	No
	RS422	No	Yes	No	No
	Ethernet	Yes	Yes	Yes	Yes
	USB	Yes	Yes	Yes	Yes
	CAN Interface	No	Yes	No	No
	Profibus	No	No	Yes	No
	Profinet	No	No	Yes	No
Operating temperature	-10°C to +40°C				
Storage temperature	-20°C to +70°C				
Relative Humidity	Max. 85% non-condensing				
Mono filling, fixed	Option				
Check weighing, fixed	Option				
Belt weighing, fixed	Option				
Force measurment, fixed	Option				
Protection class	IP45				
Protection class build in cabinet	IP65				
Weight	± 700g	± 700g	± 700g	± 700g	± 2.100g



PENKO

an ETC Company





## About PENKO

At PENKO Engineering we specialize in weighing. Weighing is inherently chemically correct, independent of consistency, type or temperature of the raw material. This means that weighing any kind of material guarantees consistency and thus, it is essential to sustainable revenue generation in any industry. As a well-established and proven solution provider, we strive for the ultimate satisfaction of custom design and/or standard applications, increasing your efficiencies and saving you time, saving you money.

Whether we are weighing raw materials, components in batching, ingredients for mixing or dosing processes, - or weighing of static containers and silos, or - in-motion weighing of railway wagons or trucks, by whatever means required during a process, we are essentially forming vital linkages between processes and businesses, anywhere at any time. We design, develop and manufacture state of the art technologically advanced systems in accordance with your strategy and vision. From the initial design brief, we take a fresh approach and a holistic view of every project, managing, supporting and/or implementing your system every step of the way. Curious to know how we do it? [www.penko.com](http://www.penko.com)

## Certifications

PENKO sets high standards for its products and product performance which are tested, certified and approved by independent expert and government organizations to ensure they meet – and even – exceed metrology industry guidelines. A library of testing certificates is available for reference on:

[www.penko.com/nl/publications\\_certificates.html](http://www.penko.com/nl/publications_certificates.html)



## PENKO Professional Services

PENKO is committed to ensuring every system is installed, tested, programmed, commissioned and operational to client specifications. Our engineers, at our weighing center in Ede, Netherlands, as well as our distributors around the world, strive to solve most weighing-system issues within the same day. On a monthly basis PENKO offers free training classes to anyone interested in exploring modern, high-speed weighing instruments and solutions. Training sessions on request:

[www.penko.com/training](http://www.penko.com/training)

## PENKO Alliances

PENKO's worldwide network: Australia, Brazil, China, Denmark, Germany, Egypt, Finland, France, India, Italy, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Syria, Turkey, United Kingdom, South Africa, Slovakia Sweden and Switzerland, Singapore.

A complete overview you will find on: [www.penko.com/distributor](http://www.penko.com/distributor)

