

PLSC-1000 *Portable Line Speed Counter*

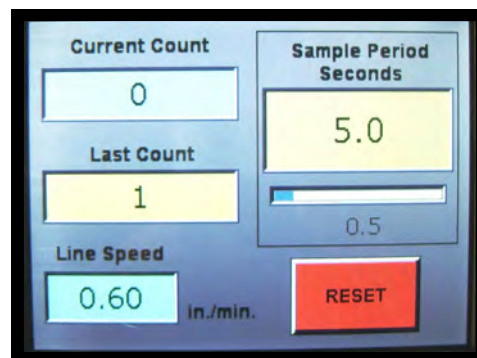
Features

- Cost effective portable device
- Magnetic machine base provided to position encoder on equipment
- Precision Optical Encoder based measuring wheel sensor
- Simple color touch screen operator interface
- Display settings for standard or metric units
- Simple design makes it easy to integrate into existing systems
- Requires no hardware to install or use
- Compatible with magnetic, Hall effect and photoeye sensors



Applications

- Production line/equipment length speed monitoring
- Production line/equipment commissioning
- Length/speed confirmation and calibration
- Maintenance, troubleshooting & PM programs
- Laboratory testing
- Product development



Functions

Single Encoder Model	<ul style="list-style-type: none"> ◆ Line speed measurement ◆ Length measurement ◆ Line stop, over speed/under speed detection
Double Encoder Model	<ul style="list-style-type: none"> ◆ Line speed measurement (2 positions simultaneously) ◆ Length measurement (2 positions simultaneously) ◆ Differential speed between 2 surfaces/rolls ◆ Ratio between 2 surfaces/rolls
Options	<ul style="list-style-type: none"> ◆ Encoders to support a wide range of speed and mounting requirements ◆ Encoder wheels are available in different diameters, widths and surface materials ◆ NTS Certified encoder wheels ◆ Fixed and roll around mounting stands for the PLSC1000 and encoders ◆ Custom designs to meet special requirements

Please contact Izumi International, Inc. for special requirements

PLSC-1000 *Portable Line Speed Counter*

Specifications

The PLSC-1000 has 8 inputs that can be connected to many different types of encoders and sensors to maximize its flexibility to meet application needs. Up to 8 encoders can be configured to run simultaneously dependent on the encoder output type and counting methods selected.

High / Low Speed Counter Inputs

- ◆ High Single Channel (A Pulse) Output Encoders, Up Counting Only, 100kHz Pulse Rate
- ◆ High Dual Channel (A Pulse + Direction) Output Encoders, Up/Down Counting, 100kHz Pulse Rate
- ◆ High Dual Channel (A Pulse /B Pulse) Output Encoders, Up/Down Counting, 50kHz Pulse Rate
- ◆ Low Up to 8 Single Channel (A Pulse) Output Encoders, Up or Down Counting, 10kHz Pulse Rate

Standard Encoders

The PLSC-1000 is supplied with one of two standard programmable output encoders to allow a wide range of speeds to be measured. (Other encoders can be supplied for special needs.)

- ◆ Encoder Range 1 - Pulse Per Revolution Selection 30, 240,300,360,400,480,600, or 1500 PPR
- ◆ Encoder Range 2 - Pulse Per Revolution Selection 1-0,12,15,18,20,24,30,36,40,48,60,80,120, 192, or 240 PPR

Measuring Wheels

Two Measuring Wheels are attached to the encoder supplied with the PLSC 1000. The Measuring Wheel utilized has the following specifications:

- ◇ Construction: Aluminum Hub with precision ground Urethane surface
- ◇ Circumference: 12.00" +/- 0.03" (NIST Certified wheels available on request)
- ◇ Diameter: 3.82" +/- 0.01"
- ◇ Urethane Surface Width: 1" (FDA compliant, food grade)
- ◇ Urethane Shore Hardness: 83A
- ◇ Maximum RPM: 2000
- ◇ Operating Temperature Range: -20 to 150F
- ◇ Shaft Size: 3/8"

Accuracy

- ◆ Base Accuracy of the PLSC 1000 High Speed Counters: +/- 1 Encoder Count
- ◆ Un-calibrated Accuracy with a Standard Measuring Wheel: +/- 0.25% Display Value
- ◆ Calibrated Accuracy: Dependent on the accuracy of the calibration standard and method.

Important Accuracy Notes:

As part of installation and periodic calibration, the actual measuring wheel circumference should be measured and entered into the PLSC 1000 to reduce cumulative length counting offsets due to the wheel circumference +/- tolerance. Also, the use of an appropriate NITS certified length standard to calibrate the PLSC-1000 will significantly improve the running accuracy of the system. Care should be taken to insure that there is no slip between the measuring wheel and the surface of the product being measured. The measuring wheel running surface should be kept clean and oil free.

Maximum Speed Measurement

2000 Ft/Min. (Maximum RPM of the Measuring Wheel)

Please contact Izumi International, Inc. for special requirements