



MODEL PDM-1506

# SEMITRONIK



## PRODUCTION DATA MONITOR

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## PRODUCTION DATA MONITOR

- Noncontact measurement of :
  - Length
  - Quality
  - Speed
- Different models available to meet any requirement.
- Centralised computer controlled Production Data Monitor with software package for data management.
- Software package available to meet individual requirement.
- Sensors :
  - Proxy sensor :
    - Magnetic / Optical Type
  - Encoder sensor
  - Roller sensor
- System available with required measuring accuracy.

The Semitronik PDM series inaugurated a new era in production measurement and control. Now, expanded and enhanced, this first family of electronic count/control instruments offer you the kind of choice from a single source that you have long awaited. There is no-compromise in providing most reliable and accurate measuring system for almost any type of high speed industrial production monitoring and control system. Specifically designed for spinning machine both ring and O.E., draw frames, twistors, doublers and cards, knitting machine, looms, warping machine, sizing machine, shearing / cropping machine and fabric processing machines.

### SEMITRONIK

### PRODUCTION DATA MONITOR FOR

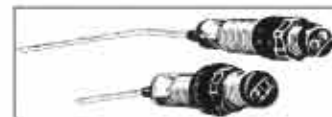
- Speed / RPM / TPM measurement.
- Total meterage / yardage measurement with the indication can be in either metres / yards / hanks or kg. Pre-set arrangement.
- The system can be also equipped with following additional data storage facility :
  - No. of machine stoppage per shift / day.
  - Total machine stoppage time per shift / day.
  - Efficiency of the machine.
  - Key board programming of roller diameter for ease of calibration.

You will find all the options you need to meet even the most exacting requirements including :

- Simple production counting.
- Length measurement.
- Cut-to-length operations.
- Batching / roll forming / blending / dispensing.
- Motor speed monitor / control.
- Printing.
- Parts counting / coil winding.
- A wide range of other industrial process like paper, plastic, steel etc. industries.

### TECHNICAL SPECIFICATIONS

- No. of digits : 6



### PHOTOELECTRIC SENSORS

Thru Beam Sensor Receiver	TBS-	503
DC Emitter	DE-	504
AC Emitter	AE-	505



### PROXIMITY SENSOR

8 mm Proximity	P-504
12 mm Proximity	P-505
18 mm Proximity	P-506
Mounting Bracket	MB-507



### SHAFT ENCODERS / MEASURING WHEELS

Medium Duty-Single Channel	MD-508
MEASURING WHEEL	
Aluminium Wheels	AW-509
Rubber Rim Wheels	RW-510
Hardened Steel Wheels	HSW-511



Model PDM-1503 / 1S



- 6 keys for data feeding or operation.
- User entry for calibration and pre-set length.
- 6 digit display for total length per shift.
- On-line hold facility.
- Battery back-up for data storage in case of power failure.
- Possibility of monitoring / observing any parameter in run mode.
- 2 output : i) Relay for pre-set length  
ii) Alarm
- 2 input : i) Encoder output  
ii) Presence of material

#### SENSORS

- Magnetic / photo-cell pick-up / Proximity sensor.
- Rotary encoder.
- Roller type.
- Custom-built sensor / or as per specific application.

#### ADVANCED FEATURES

##### FAMILY APPEARANCE DESIGN

- DIN housing.
- Bright 7 segment LED display.
- Non-volatile memory.

##### INPUT / OUTPUT VERSATILITY

- 120 / 240V AC power.
- Quadrate count inputs.
- Relay & Transistor.
- 12V DC transducer output power.

##### BROAD VARIETY OF LOGIC FUNCTIONS

- 1 or 2 set points.
- Batch counting.
- Totalizing.
- Scaling.
- Rate monitoring.

This unit replaces validity the mechanical counters with precise electronic ones. It enables a very high working speed and has a flawless reliability, owing to the use of LSI components for its micro miniaturised size.

The models offered, cover a wide range of applications from the simple visualization of a repeated event to data survey, to be used for production control.

Our product accepts input signals available from different types of sensors (microswitch, proximity contacts type etc.) and therefore has a wide flexibility of use.

#### MODELS AVAILABLE

##### SPEED INDICATOR

- **MODEL PDM-1503**



**Model PDM-1503**

- RPM or Speed Indicator 3 digit with 1" display with Proxy sensor.
- **MODEL PDM-1503 / 1S**  
RPM or Speed Indicator 0-99.9 mtrs / min. with 2" size single side display with Proxy sensor.
- **MODEL PDM-1503 / 2S**  
RPM or Speed Indicator 0-99.9 mtrs / min or yards / min with 2" size double side display with Proxy sensor.

##### METERAGE TOTALIZER WITH 6 DIGIT DISPLAY

- **MODEL PDM-1504**  
Meterage Totalizer 6 digit display 0.3" size with Proxy sensor.
- **MODEL PDM-1504R**  
Meterage Totalizer 6 digit display 0.3" size with Roller sensor with one pulse / revolution with side socket / bracket and square pipe for mounting the sensor.
- **MODEL PDM-1504T30**  
Meterage Totalizer 6 digit display 0.3" size with Trumeter type roller sensor of 30 pulse per revolution.

##### PRE-SET COUNTER

- **MODEL PDM-1505**  
Pre-set counter 6 digit display 0.5" size with Proxy sensor.
- **MODEL PDM-1505FRP**  
System same as PDM-1505 but with forward / reverse counting facility.
- **MODEL PDM-1505G**  
Pre-set length counter with Guide Roll of 500 mm width & 100 mm dia with mounting arrangement of Proxy sensor for jet dyeing machine to feed the fabric to jet dyeing machine with required length.
- **MODEL PDM-1505FR30**  
System same as PDM-1505G with Roller type sensor with:
  - One pulse / revolution.
  - Side socket / bracket and square pipe.
  - Forward / reverse counting facility.
- **MODEL PDM-1505FR**  
System same as PDM-1505FR30 but with Trumeter type sensor with +/- 1 mm accuracy and forward / reverse counting facility.

##### SPEED INDICATOR & METERAGE TOTALIZER WITH PRE-SET ARRANGEMENT

- **MODEL PDM-1506**



**Model PDM-1505 PR**

Speed indicator (3 digit with 1" display) and meterage totalizer (6 digit with 0.3" display) with Proxy sensor.

- **MODEL PDM-1506R**  
System same as PDM-1506 but with:
  - Roller type sensor.
  - 30 pulse / revolution.
  - Side socket / bracket and square pipe for mounting the sensor.
- **MODEL PDM-1506T**  
System same as PDM-1506R but with Trumeter type sensor with +/- 1 mm accuracy.
- **MODEL PDM-1507**  
Scanning type efficiency monitor for any machine or group of machines with display for:
  - Efficiency : 0-99%.
  - 16 character, 2 line Alpha numeric LCD display.



**Model PDM-1504**



# CENTRALIZED MANAGEMENT SYSTEM FOR DATA MONITORING AND RETRIEVAL OF INFORMATION

○ SPINNING  
○ WEAVING / KNITTING  
○ FABRIC PROCESSING  
MACHINES  
OR  
ANY INDUSTRIAL MACHINES

## THE ADVANTAGES OF THE SYSTEM

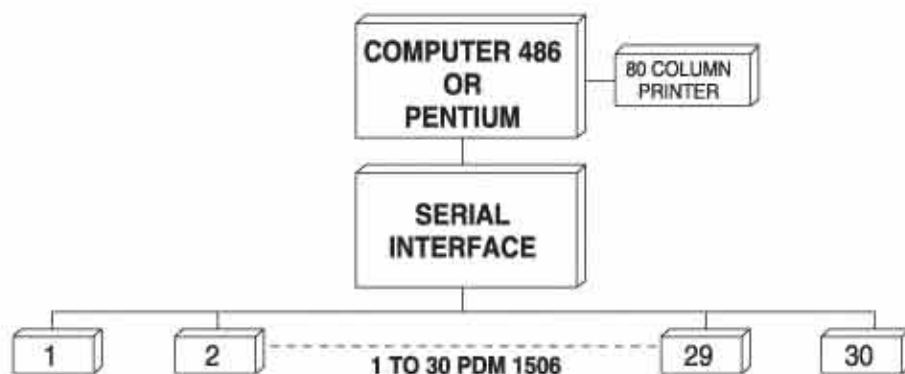
Instantaneous information for individual machine such as:

- RPM or speed of the machine.
- Total meterage / yardage / hank or kg of material processed per shift / day.
- Shift efficiency i.e.
  - No. of stoppage per shift / day.
  - Total stoppage time per shift / day etc.

The figure below gives block schematic layout of wiring and installation of units.

For the installation of the system, the connection of each machine is to be brought to one central place interfacing with computer.

Schematic layout for  
hooking-up no. of SEMITRONIK PRODUCTION DATA MONITOR with Centralized Computer for  
Data Collection & Management System for group of Spinning, Knitting, Weaving & Processing machines.



Information is available for any machine at any time out of 30 total machines hooked-up with the unit :

- Speed of the machine.
- Total length in meters / shift / day.
- Efficiency of the individual machine.

**120 Ohm TWISTED PAIR SHIELDED CABLE TO BE USED FOR WIRING WITH MAXIMUM CABLE LENGTH OF 1000 METERS.**

For further details, contact



Since our policy is of continuous development and improvement, we reserve the right to supply product which may differ from those illustrated & described in this publication.

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