

# MICROCONTROLLER BASED TACHOMETERS & CONTROLLERS

## Introduction:

**MPTM** range of programmable tachometers indicator/controller is available in 8 different regular models apart from tailor made solutions including *time-weighted rate of change of R.P.M. w.r.t. time protection in real time* virtually covering all industrial and research applications meeting all electrical, thermal, mechanical, and environmental specifications. These indicator/controllers are first choice for online monitoring R.P.M. of turbines/motors/diesel engine/chassis dynamometers/drives/wind mill and many other uncountable applications. These also find application in heavy electrical engineering industries, defense, and electrical/mechanical m/c testing instrument, industrial electronics, railway, and avionics and many research and development activities and are compatible to any standard r.p.m. transducer like hall sensor, proximity, spark plug pulse/fuel flow in dynamometers with very high degree of accuracy/repeatability/reliability. These indicator/controllers are available in different constructional material like ceramic-coated ms/poly carbonate.

## Benefits:

- Simple installation and operational compatibility.
- Consistent performance over large temperature range (80°C)
- Scaled directly in R.P.M. with repeatable accuracy.
- Auto zero offset without drift/option of dN/dt protection.
- All standards din sizes and custom sizes.



Hall effect sensor



MPTM- 0200



multi function tachometers for dynamometers

## TACHOMETER

## R.P.M.<20000 R.P.M. TACHOMETER

## R.P.M.< 999999R.P.M.

Model	R.P.M .X100	R.P.M. Signal (d.c. /pulse)	Sensor	Accuracy % of reading	Model	R.P.M. X100	R.P.M. Signal (d.c./pulse)	Sensor	accuracy % of reading
MPTM-0030	0030	12.0/option	1/2/3/4	0-50	MPTM-0500	0500	12.0/option	3 / 4	0-50
MPTM-0060	0060	12.0/option	1/2/3/4	0-50	MPTM-0999	0999	12.0/option	3 / 4	0-50
MPTM-0120	0120	12.0/option	2/3/4	0-50	MPTM-1500	1500	12.0/option	3 / 4	0-50
MPTM-0200	0200	12.0/option	2/3/4	0-50	MPTM-9999	9999	12.0/option	3 / 4	0-50

Pl. see as under for sensor compatibility as under.

## General electrical/mechanical specifications:

Operating voltage: 220 volts A.C./50Hz/ 12 volts d.c.

Response time: 0.1 microseconds

R.P.M. range: 1.0 - 999.0 kilo cycle per second in different model.

Signal: 1-inductive sensor, 2-photoelectric sensor 3-magnetic pick-up 4-hall effect sensor

R.P.M. signal: 12.0 volts D.C./PULSE

Accuracy: 0.5/1.0/2.0 % reading

Repeatability: 100 of reading

Step down ratio: 1:100000

Interfaceability: RS-232/0-12 volts D.C.-Linear

Control: relay changeover against RPM set point/total revolution

Tripping aging dN/dt setting-optional

Transmission range: upto 1000 meters

Display; 3/4/5/6 digit LED/LCD display- acceleration display option

Size: 48x96, 96x96, 192x96

Resolution: 1/10 of least significant bit

Size: 48x48/48x96/96x96/192x96

### NOTES:

1-inductive sensor, 2-photoelectric sensor 3-magnetic pick-up 4-hall effect sensor.

2.The numeral after product code indicates the ( volt/ampere) range and last digit corresponds to size of panel (48x48-1, 48x96-2, 96x96-3, 96x192-4 As for example, MPTM-999991 corresponds to 99999 R.P.M. (max) and panel body is ceramic coated mild steel.



r.p.m. sensors

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