## Tri-Axial Transient Shock Data Logger

### OM-CP-TSR101

5 YEAR WARRANTY  CE

- ✔ **3-Axis Shock Recorder**
- ✔ **Built-In Accelerometers**
- ✔ **Measures Dynamic and Static Acceleration**
- ✔ **Programmable Start Time**
- ✔ **Compact and Reusable**
- ✔ **Optional Password Protection**
- ✔ **High Speed Download (115,200 baud)**
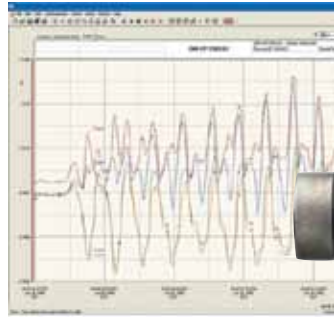


**OM-CP-IFC200 Windows software displays data in graphical or tabular format.**



**OM-CP-TSR101-50 shown smaller than actual size.**

The OM-CP-TSR101 is a battery powered, stand alone 3-axis shock data logger. The OM-CP-TSR101 measures and records instantaneous shock levels when the user-selectable shock levels have been exceeded. There are 15 rates to chose from ranging from 1024 to 1 Hz.

The OM-CP-TSR101 is valuable in characterizing environments such as packaging and fragility assessment (drop testing), break and crash testing, and shipping validation. This is an all-in-one compact, portable, easy to use device that will measure and record approximately 349,000 measurements per axis.

The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

The OM-CP-TSR101 makes data retrieval quick and easy. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.

## Specifications

**Channels:** Shock (3-axis)
**Acceleration Type:** MEMS semiconductor
**Reading Rate Range:** 15 options from 0.976 ms/1024 Hz to 1 second, selectable in software
**Trigger Specifics:** User settable trigger levels on X, Y, and/or Z axis, and specifies # of samples after triggers

| Acceleration Range (g) | ±5 | ±50 | ±100 | ±250 |
|---|---|---|---|---|
| Calibrated Accuracy (g) | ±0.2 | ±1 | ±2 | ±4 |
| Acceleration Resolution (g) | 0.01 | 0.05 | 0.1 | 0.2 |

**Pre-Trigger Specifics:** Records a pre-trigger of up to 50 readings prior to the trigger point
**Frequency Response:**
**5g:** 0 to 512 Hz
**50, 100, 250g:** 0 to 400 Hz (approx.)
**Real Time Recording:** May be used with PC to monitor and record instantaneous acceleration in real time (only at 1 second rate, not possible during logging)
**Start Modes:** Software programmable, immediate start or delay start up to 180 days in advance
**Password Protection:** An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password
**Calibration:** Digital calibration through software
**Calibration Date:** Automatically recorded within device

**Power:** 9V lithium or alkaline battery (included), user replaceable
**Battery Life:** 7 days typical with lithium battery, immediate start, 1024 Hz
**Data Format:** Date and time stamped, G and mG
**Time Accuracy:** ±1 minute per month at 20 to 30°C
**Computer Interface:** USB or serial interface (cable required) 115,200 baud
**Software:** XP SP3/Vista/7 and 8 (32- and 64-bit)
**Operating Environment:** -20 to 60°C (-4 to 140°F) 0 to 95% RH non-condensing
**Dimensions:** 89 H x 112 W x 26 mm D (3.5 x 4.4 x 1.0")
**Weight:** 340 g (12 oz)
**Material:** Anodized aluminum

## To Order

| Model No. | Description |
|---|---|
| **OM-CP-TSR101-5** | Tri-axial shock data logger, ±5 g range |
| **OM-CP-TSR101-50** | Tri-axial shock data logger, ±50 g range |
| **OM-CP-TSR101-100** | Tri-axial shock data logger, ±100 g range |
| **OM-CP-TSR101-250** | Tri-axial shock data logger, ±250 g range |
| **OM-CP-IFC200** | Windows software and 1.8 m (6') USB interface cable |
| **OM-CP-SVP-SYSTEM** | FDA 21 CFR part 11 compliant IQ/OQ/PQ secure software validation workbook and software package (unlimited users, license per computer) |
| **OM-CP-SHOCK-MAG-KIT** | Magnet mount kit for tri-axial shock data loggers |
| **OM-CP-BAT103** | Replacement 9V lithium battery |

*Comes complete with 9V lithium battery. Operator's manual and USB interface cable are included with the **OM-CP-IFC200** Windows software (required to operate the data logger and sold separately).*

***Ordering Example: OM-CP-TSR101-5,** tri-axial shock data logger and **OM-CP-IFC200,** Windows software and USB interface cable.*