

## T2 COMPACT TIRE GROUND PRESSURE DISTRIBUTION MEASUREMENT SYSTEM (TPM-2)

Small Tyre Contact Pressure Distribution Measurement System (TPM-2) (Small Tyre Contact Pressure Distribution Measurement System) is suitable for graphical inspection of tread ground pressure distribution of passenger, motorcycle, non-motorized vehicles, etc., capturing static or dynamic tire imprint pressures, conducting tire tread and performance analysis, and Optimize tire design.

Tire manufacturers need to understand how tires change under various loads and applications to improve handling and responsiveness. This analysis tool provides a better understanding of tire design and tire ground pressure distribution.



### TPM-2 System Advantages

|                   |                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------|
| Point Density     | High point density                                                                                                 |
| powerful software | Long axis, short axis, pressure, area, average pressure per unit area<br>Visualization of the hardness coefficient |
| Reports           | One-click export of tire impression parameters                                                                     |

### TPM-2 System Parameters

| Appearance size | Communication | Frequency | No. of sensing points | Peak pressure |
|-----------------|---------------|-----------|-----------------------|---------------|
| 814*670*51 mm   | 400*400       | 50Hz      | 65536                 | 500kgf        |

### Tire Ground Pressure Distribution Measurement Applications

- Evaluation of tire impression patterns
- Evaluation of suspension and comfort
- Tire Mold Adjustment
- Competitive benchmarking
- Analysis of various tire compounds and tread designs
- Tread and tread block design and testing
- Manufacturing quality assurance

### Ground Print Test Report for a Certain Type of Automobile Tire

| Test information | Purpose                          | wet                        |                             |                      |                                                                                       |                        |                                 |       |
|------------------|----------------------------------|----------------------------|-----------------------------|----------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------|-------|
|                  | specifications                   | qwet                       | trademark                   | wetrqw               | figure                                                                                | erte                   | rim                             | wrtfw |
|                  | air pressure(kpa)                | 100.0                      | load(Kg)                    | 501.4                | Tire number                                                                           | ewr                    | weight(Kg)                      | 100   |
| Test result      | Tire static load characteristics |                            |                             |                      | contact patch                                                                         |                        |                                 |       |
|                  | outer perimeter (mm)             | squat (mm)                 | Static load radius (mm)     | friction coefficient |  |                        |                                 |       |
|                  | 100                              | 10                         | 50                          | 0.92                 |                                                                                       |                        |                                 |       |
|                  | Ground Stamp Analysis            |                            |                             |                      |                                                                                       |                        |                                 |       |
|                  | long axis of imprint (mm)        | short axis of imprint (mm) | Total area of imprint (mm²) | grounding area (mm²) | ground pressure (N)                                                                   | coefficient of contact | Ground Stamp Pattern Saturation |       |
| 253.1            | 210.9                            | 53393.6                    | 14133.3                     | 4913.4               | 1.20                                                                                  | 26.47%                 |                                 |       |

TPM-2 is an optional system with related hardware and software. Ground pressure distribution measurement system is for static test and dynamic test. The ground pressure distribution is only for reference.