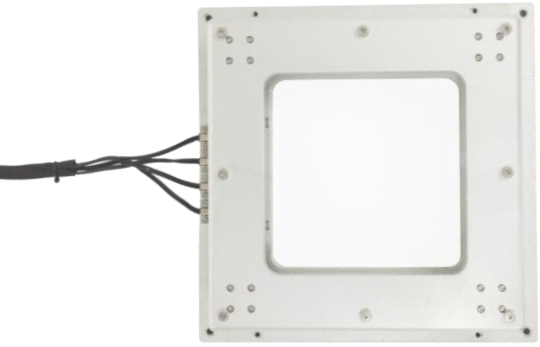
Tec Gihan

HAPTICS FORCE MEASUREMENT PLATFORM



TF-2020

Tactile Measurement Platform

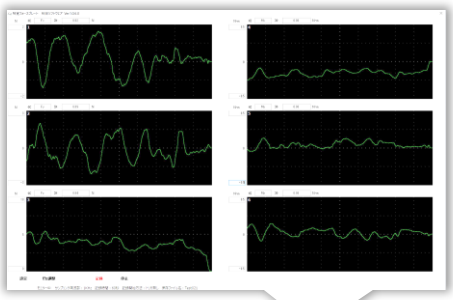
Ultra-sensitive Force Plate for tactile measurement and material evaluation.

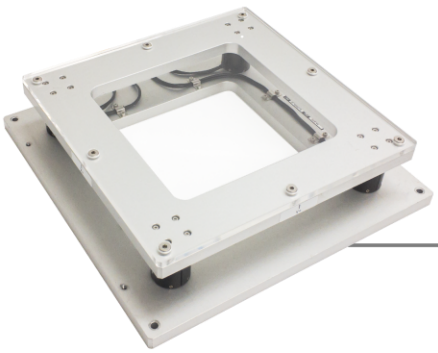
Features

- ◇ With rated capacity of 10N, subtle 6-component forces can be detected.
- ◇ Quantifies human sensation of handling an object.
- ◇ Ideal for measuring finger contact force.
- ◇ COP and friction coefficient can also be calculated.
- ◇ Recording can be started by an external trigger (contact point) input.
- ◇ Capable of sensing weight as small as 1g.
- ◇ Digital and analog outputs of six-component force after interference correction.

System

Easy data acquisition with the control software included in the package.
Waveform monitoring, sampling rate and filtering settings are also available with the software.





Digital

USB

Analog ∓10V

External device
A/D converter

Contact signal

Trigger Input

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Versatility

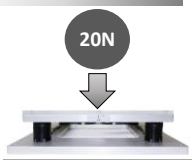
Customizations

Aluminum Top Plate

For material evaluation, it is necessary to secure a material on the force plate.
The top plate of the TF-2020 can be changed to aluminum, on which screw holes can be provided as an option.

20N Model

If the 10N model is too sensitive or need larger capacity, the customized 20N model may solve problems.

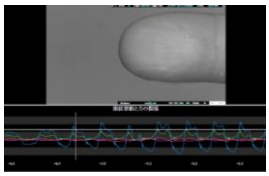


Synchronized Measurement Systems

Yubi-Recorder

Simultaneous measurement with a film sensor vibration measuring device, Yubi-Recorder, which allows quantitative evaluation of sensitivity by fixing a material on the TF-2020 and sliding the finger over it as well as acquisition of vibration components transmitted to the finger.

Image System



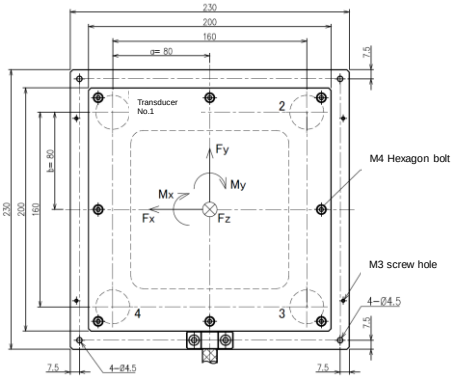
This system approaches the transition and phenomenon of forces with images taken from the bottom of the TF-2020 using a high-speed camera. This provides not only the result of how force worked, but also deeper observation and analysis of movements.

Specifications

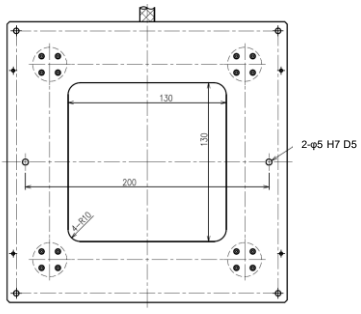
Model	TF-2020
Rated capacity	Fx ・Fy・ Fz = ±10N, Mx・My ・Mz = 0.8Nm
Allowable overload	200%
Non-linearity	±1.0% RO
Hysteresis	±1.0% RO
Interference	±2.0% RO
Natural frequency	Fz=270Hz
Sampling frequency	10KHz (low-pass filter 1KHz)
Resolution	16-bit
Output	Digital/Analog output (±10V/FS) of 6-component force after interference correction
Trigger functions	Contact signal input (Recording start)
Power supply	5V DC, AC adapter included (100-240V AC)
External dimensions and weight	Main unit: 230(L)× 230(W) × 53(H) mm , 2250g Amplifier: 120(L)× 105(W) × 30(H) mm , 445g
Standard accessories	AC adapter, 1.5m analog output cable (BNC end), USB cable, Control software

Dimensions

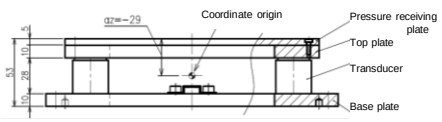
【Top】



【Bottom】



【Side】



***The design and specifications are subject to change without prior notice.**

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