


Features

- Extremely wide measuring range
- Excellent measuring accuracy
- Custom flooring material
- Floor integration options
- Built-in amplifier with acquisition system
- Start and stop triggers
- LAN connection
- Control & acquisition software included
- Real-time user feedback
- Cost-effective

Applications

- Biomechanics
- Research
- Posture and movement analysis
- Jump analysis

Overview		
Model	3D-force plate 900600	
Dimensions	896 x 596 x 138 mm	
Overload range	Fx, Fy, Fz	10 kN
Interfaces	Ethernet interface Two inputs and one output digital trigger Analog force output Status LED	

Construction	
Sensors	Strain gauge / Aluminum
Top plate	Aluminum honeycomb
Bottom plate	Aluminum
Options	Flooring support plate, Aluminum base plate, Multi-plate interconnection enclosures

Performance		
Linearity	Fx, Fy	<0.1 %
	Fz	<0.1 %
Hysteresis	Fx, Fy	<0.1 %
	Fz	<0.1 %
Cross-talk	Fz → Fx, Fy	<0.3 %
Drift	Fx, Fy, Fz	<1 N / h
Natural frequency (without flooring plate)	x-axis	>150 Hz
	y-axis	>150 Hz
	z-axis	>150 Hz

Physical	
Mass	45 kg
Operating / storage temperature	10 ... 40°C / -25 ... 40°C
Operating / storage humidity	30 ... 70% (non condensing) / 0 ... 95% (non condensing)
Ingress protection	IP 00
Air pressure	700 ... 1060 hPa (max 3000m altitude)
Anchorage	8 x M8 captive screws

Electrical	
Supply voltage	85-264 VAC, 47-440 Hz
Power consumption	10W
Fuse	500 mA

Amplification				
Amplifier	8 channels: 4x Fz, 2x Fy, 2x Fx			
Analog filter	Bessel 4-pole low pass filter (cut-off frequency: 85 Hz)			
Measuring range	Adjustable upon request			
	Min.	Default range	Max.	
Measuring range on each sensor	Fx	±0.1 kN	±0.9 kN	±7.2 kN
	Fy	±0.1 kN	±1.2 kN	±9.4 kN
	Fz	0.1 kN	3.3 kN	6.7 kN
Resolution	Fx	7 mN	60 mN	460 mN
	Fy	9 mN	80 mN	600 mN
	Fz	4 mN	140 mN	280 mN
Noise (peak-to-peak)	Fx	±0.2 N	±0.2 N	±1.2 N
	Fy	±0.2 N	±0.2 N	±1.2 N
	Fz	±0.1 N	±0.6 N	±1.1 N
Sensitivity at analog interface	Fx	24 N/V	190 N/V	1510 N/V
	Fy	31 N/V	250 N/V	1970 N/V
	Fz	14 N/V	460 N/V	920 N/V

Ethernet interface	
Connector	RJ-45
Speed	10 / 100 Mbit/s
Analog-to-digital converter	Built-in, 8 channels, 16-bit resolution, simultaneous sampling
Sampling rate	100Hz ... 10 kHz

Digital interface		
Trigger input	BNC	5V digital TTL/CMOS, isolated
Aux input	BNC	5V digital TTL/CMOS, isolated
Sync output	BNC	5V digital TTL/CMOS, isolated
Zero input	BNC	5V digital TTL/CMOS, isolated

Analog interface		
Connector	15-pin sub-D HD	
Output channels	8 channels: 4x Fz, 2x Fy, 2x Fx	
Output range	Fx, Fy, Fz	0 to 10 V
Output type	Fx, Fy, Fz	Single-ended ground referenced

Software	
Data acquisition	3D-ForcePlate©
Functions	Force & center of pressure monitoring, Configuration, Data acquisition and storage, Visualization of acquired data, Video recording, Computation of forces, moments and center of pressure.
Compatibility	Windows 10 / 11
Export file format	Native binary, ASCII tab delimited text
Software options	Digital data streaming, Decomposition of left & right foot forces for double stance on a single force-plate, Ethernet client for Vicon Nexus, Qualisys QTM, Noraxon MR3.