

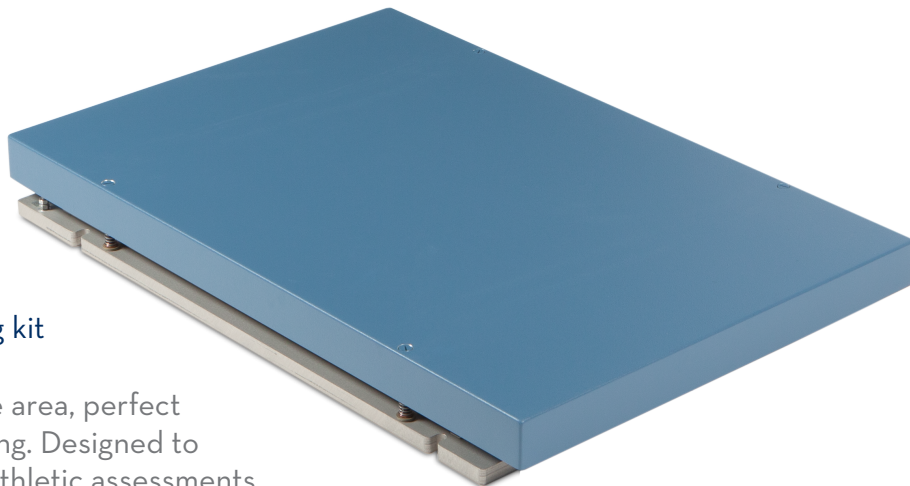
# BMS600900

## Force Platform

OPTIMA™ Biomechanics Measurement Series (BMS)

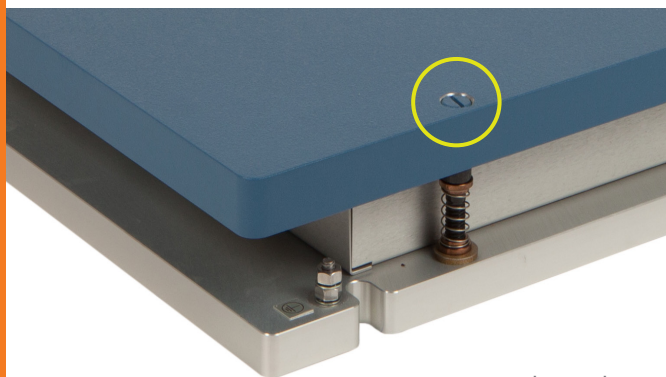
### System Components:

Force plate, Optima external amplifier, 9m (30ft) transducer cable, and mounting kit

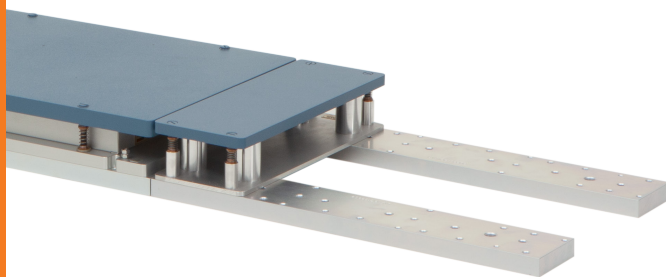


The BMS600900 features a large surface area, perfect for sports performance analysis and testing. Designed to accommodate dynamic movements and athletic assessments, this mounted force platform has been installed in running tracks, basketball courts, weightlifting racks, and more.

With its high natural frequency, one of the most common applications for the BMS600900 is a dual-plate setup for jump and drop landing analysis.



Features through-top mounting access



Modular Rail System (MRS) and Filler Plates enable easy reconfiguration of force plates and future lab growth

### BMS600900 SPECIFICATIONS

Dimensions (W x L x H)	600 x 900 x 101.6 mm (23.6" x 35.4" x 4")
Weight	32 kg (70 lb)
Sensing Elements	Strain gauge bridge
Channels	Fx, Fy, Fz, Mx, My, Mz
Top Plate Material	Composite
Temperature Range	-17 to 52°C (0°F to 125°F)
Analog Output	6 Channels
Digital Output	USB (with <b>OPTIMA amplifier</b> )
Crosstalk*	±0.2% of applied load
Fx, Fy, Fz Hysteresis	< 0.5% full scale output
COP Accuracy*	< 0.5 mm (0.02 in.)
Measurement Accuracy*	±0.5% of applied load

\*Typical Value: Minimum applied load 50 lb.

Site and installation requirements available upon request.



ASTM INTERNATIONAL

The only force platform systems that conform to the ASTM F3109-23 technological standard for performance verification of multi-axis force plates.



# BMS600900

## Force Platform

AVAILABLE MODELS			
MODEL	BMS600900-1K	BMS600900-2K	BMS600900-4K
Fz Capacity	4450 N (1000 lbs)	8900 N (2000 lbs)	17800 N (4000 lbs)
Fx, Fy Capacity	2225 N	4450 N	8900 N
Mx Capacity	2030 Nm	4070 Nm	8140 Nm
My Capacity	1400 Nm	2700 Nm	5400 Nm
Mz Capacity	1000 Nm	2000 Nm	4100 Nm
Fx, Fy Sensitivity	0.67 $\mu\text{V}/\text{VN}$	0.34 $\mu\text{V}/\text{VN}$	0.17 $\mu\text{V}/\text{VN}$
Fz Sensitivity	0.17 $\mu\text{V}/\text{VN}$	0.08 $\mu\text{V}/\text{VN}$	0.04 $\mu\text{V}/\text{VN}$
Mx Sensitivity	0.93 $\mu\text{V}/\text{VNm}$	0.47 $\mu\text{V}/\text{VNm}$	0.23 $\mu\text{V}/\text{VNm}$
My Sensitivity	1.03 $\mu\text{V}/\text{VNm}$	0.51 $\mu\text{V}/\text{VNm}$	0.26 $\mu\text{V}/\text{VNm}$
Mz Sensitivity	2.06 $\mu\text{V}/\text{VNm}$	1.04 $\mu\text{V}/\text{VNm}$	0.52 $\mu\text{V}/\text{VNm}$
Fx, Fy Natural Frequency*	340 Hz	400 Hz	480 Hz
Fz Natural Frequency*	430 Hz	430 Hz	440 Hz

\*Natural Frequency specifications shown for Standard Model (High Frequency Composite Top).  
See Specifications & Details on website for complete English Units.



### Heart of the OPTIMA system.

With its advanced features, the OPTIMA (OPT-SC) signal conditioner allows for simple setup, increased accuracy, and the option for direct digital integration.



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ISO 9001:2015 certified  
ISO 13485:2016 certified  
ISO 17025:2017 accredited

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OPTIMA BMS/HPS SPEC SHEETS Rev 1

