

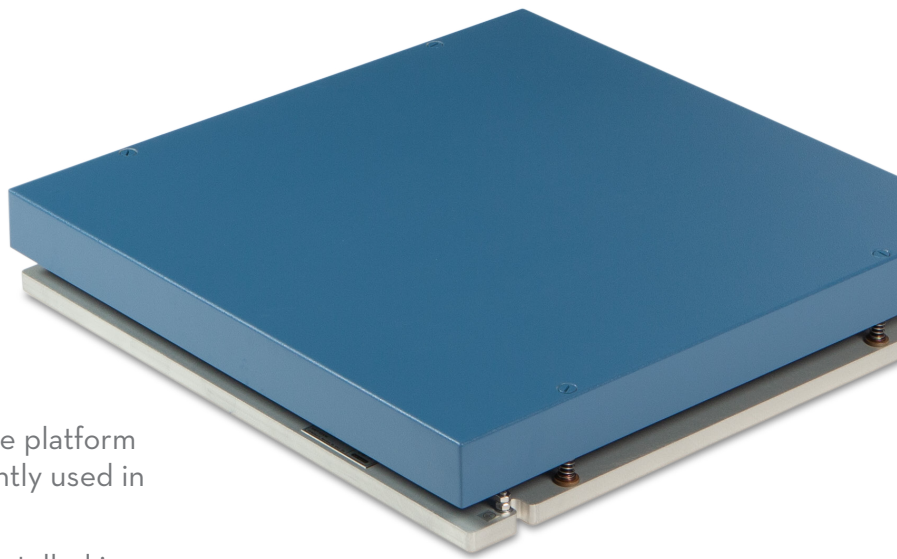
# BMS900900

## Force Platform

OPTIMA™ Biomechanics Measurement Series (BMS)

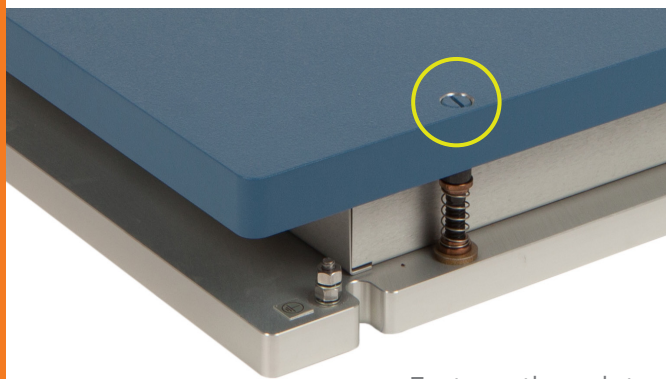
### System Components:

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

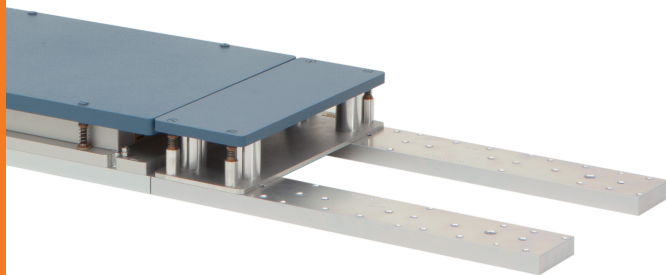


The BMS900900 is AMTI's largest single force platform for human biomechanics applications, frequently used in sports performance analysis and testing.

This mounted platform has commonly been installed in basketball courts, running tracks, weightlifting rooms, and more. With AMTI's advanced **Optima Technology**, the BMS900900 delivers exceptional accuracy and repeatability across its entire surface.



Features through-top mounting access



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

### BMS900900 SPECIFICATIONS

Dimensions (W x L x H)	900 x 900 x 101.6 mm (35.4" x 35.4" x 4")
Weight	41 kg (90 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.



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



# BMS900900

## Force Platform

AVAILABLE MODELS			
MODEL	BMS900900-1K	BMS900900-2K	BMS900900-4K
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	2030 Nm	4070 Nm	8140 Nm
Mz Capacity	1020 Nm	2030 Nm	4070 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 $\mu\text{V}/\text{VNm}$	0.46 $\mu\text{V}/\text{VNm}$	0.23 $\mu\text{V}/\text{VNm}$
My Sensitivity	0.93 $\mu\text{V}/\text{VNm}$	0.46 $\mu\text{V}/\text{VNm}$	0.23 $\mu\text{V}/\text{VNm}$
Mz Sensitivity	1.97 $\mu\text{V}/\text{VNm}$	0.99 $\mu\text{V}/\text{VNm}$	0.49 $\mu\text{V}/\text{VNm}$
Fx, Fy Natural Frequency*	290 Hz	350 Hz	430 Hz
Fz Natural Frequency*	360 Hz	390 Hz	400 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.

**AMTI**  
FORCE AND MOTION

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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

