

Surpro SP2000 Specifications

<http://www.surproprofiler.com/>

Model #	SP2000
Instrument Rating	World Bank Standard Class1
Method	Automated rolling; the operator walks behind Surpro and pushes it
Transducers	2 inclinometers; 1 optical encoder; 1 temperature sensor
Sampling Interval	250 mm Normal (Optional 12" and 300 mm)
Sample Rate	1000 samples/sec; 900 samples/m; 1.1mm/sample
Data Collect Rate	<i>Nominal:</i> 2 km/hr (1.25 mile/hr), <i>Max:</i> 4 km/hr (2.5 mile/hr)
Data Recording Rate	0.05 to 1m (1.97 to 39.4")
Static Resolution	<i>Incline</i> 0.0019 mm (0.0001")
Profile Accuracy	+/- 2 mm / 50 m (+/- 0.01" / 25 ft) plus level error for non-closed loop surveys.
Distance Accuracy	+/- 0.1 %
Max Bump Height	+/- 65 mm (+/- 2.5")
Max Incline Angle	+/- 14.5°
Operating Temp.	0 to 50° C (32 to 122° F)
Temp. Accuracy	+/- 2° C (+/- 3.6 ° F)
Weight	20.4 kg (42 lb)
Size (footprint)	254 mm (10") W x 482 mm (19") L (add handle length for full length)
Battery	Air transport IATA approved gel-cell, 2 x 12 Ahr (12Vdc). External charger supplied. Low battery warning. Battery life 20 hrs w/o motor drive connected.
On-Board Computer	100MHz 586 32 bit single chip PC, 16M RAM, 8M DiskOnChip non-volatile storage
Real Time Clock	Battery backed. Set from notebook computer.
Data Storage Media	DiskOnChip on-board nonvolatile storage holds 136 lane miles of data (download all files simultaneously to notebook computer)
Tools & Simulations	California Profilograph, Rainhart Profilograph, Rolling Straightedge
Computed Roughness Indices	IRI, RN, PRI or PI
Computed Floor Quality Indices	FF, FL, LAD _k , WI, SW _i , RMSTD _{Lx} , RMSLD _{Lx} , EC, RMSLV _L , WL _L , D _{kj} , TD _i , TDC _i , LD _i , LDC _i
Units	Metric & Imperial for all displays and output.
Data Filters	User selectable Digital Filters including Butterworth and Moving Average Filter
Data Formats	Raw data (proprietary binary), text format (ERD), roughness indices, graphical profiles, tabular data listings
Data Output	Download raw data using 115 kbaud serial port (RS-232C) Print graphic and tabular profile and roughness reports using on board parallel port or using an external notebook computer. Analyze and filter data with desktop SurPRO Utility software.
U.S. Patent	6,775,914

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