

ScanWorks™ V4i

from



ScanWorks™ V4i

The ScanWorks™ portable scanning system combines the ease-of-use of portable CCM arms with the sophistication of Perceptron's scanning technology.

The ScanWorks™ V4i sensor uses solid state, non contact, laser-based technology. Using triangulation, the scanner captures profiles generated by the intersection of a projected laser plane and the target topography.

Users can easily control data collection through buttons on the portable CCM. For each profile, the arm is used to translate the profile data into a common coordinate frame and once translated, the profile is married with the other profiles to produce digital 3D part topography.

A maximum of 768 points along the laser line at a rate of 30Hz provides the user with high-density scan data, collected at a rate of up to 23,040 points per second. The maximum width and depth of field of 73mm and 109mm respectively enables the ScanWorks™ V4i sensor to rapidly capture large geometrically complex areas.



ScanWorks™ V4

Dimensions	105mm x 52mm x 90mm
Mass	340g
Profile density	768 points/line
Update frequency	30Hz
Scan rate	23040 points/second
Mean point to point resolution	0.057
Stand-off	118mm
Depth of field	109mm
Near field width	34mm
Mid field width	45mm
Far field width	73mm
Measurement accuracy 1)	0.0240mm 2σ corner test
Feature resolution 2)	0.0045mm 2σ sphere test
Sensor feature repeatability 2)	0.0050mm 2σ sphere test
Safety	Class II _m , 660nm Laser
Certifications	UL, CSA, CE
Environmental	10°C to 40°C
Protection	Sensor IP64/Enclosure IP31

1) NIST standard

2) OSIS standard

Perceptron is registered to ISO9001:2000 standards

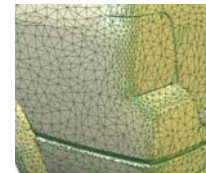
Specifications subject to change without notice



Rapid 3-D scanning of physical objects, whatever the surface material, turns it into digitised data which can then be manipulated using the PolyWorks powerful software functionality.



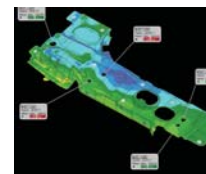
23,000 points per second point collection



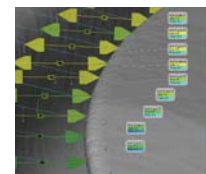
Reverse engineered polygon mesh



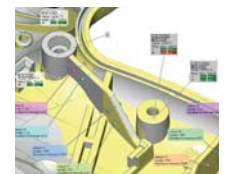
Rapid NURBS surfacing



Surface profile inspection



Gap and flush analysis



GD&T measurements