

# PreciTrack3D GmbH

## HIGHLIGHTS

- 3D Real Time Tracking
- Quality Control & Inspection
- Reverse Engineering
- ID | 2D | 3D Scanning
- Tube Inspection & Measurements
- In-Line Glass Measurement
- Metrology Automation
- Real Time Robot Tracking
- Robot Calibration
- Robot Path Programming
- Metrology Software Integration

## PRODUCTS

PRECI 3D TRACK  
PRECI 3D GUN  
PRECI 3D SCAN  
PRECI 3D ROBOGUN  
PRECI 3D CONFOCAL  
PRECI 3D REF  
PRECI 3D FLEX

## FEATURES

PRECI 3D TRACK: 3D - Tracking System  
PRECI 3D GUN: 3 - Sided Flexible Measurement Tool  
PRECI 3D SCAN: Blue Line Laser Scanner 50<sup>mm</sup>  
PRECI 3D ROBOGUN: Easy Robot Path Programming  
PRECI 3D CONFOCAL: Transparent Glass Measurement  
PRECI 3D REF: Dynamic Referencing Tool  
Flexible, Mobile, Easy Installation & User Friendly Software  
No Regular Calibration Required  
Software Tool for On-Site Probe Calibration Correction



PRECI 3D TRACK



PRECI 3D GUN



PRECI 3D ROBOGUN



PRECI 3D SCAN

PreciTrack3D GmbH

Kreuzstraße 81 | D - 85716 Unterschleißheim

Phone: +49-89-54 80 94 87 | Fax: +49-89-54 80 94 89

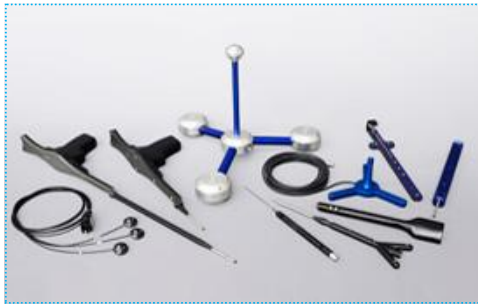
info@pt3d.de | www.pt3d.de

# PRECI 3D TRACK - TOOLS & PRECI 3D GUN

PRECI 3D TRACK



PRECI 3D TOOLS



PRECI 3D GUN



- Multi Faces Flexibility
- Light Weight
- Robust & Easy Handling
- Easy Calibration Correction

## PRECI 3D TRACK 900<sup>mm</sup>

<b>Accuracy</b>	Up to 60 <sup>µm</sup> (2 )
<b>Speed</b>	Up to 1 <sup>KHz</sup>
<b>Dimension (mm)</b>	900 <sup>L</sup> x 10 <sup>B</sup> x 10 <sup>H</sup>
<b>Measurement Begin-End</b>	From 1.0 <sup>M</sup> to 5.0 <sup>M</sup>
<b>Measurement Volume</b>	4 <sup>M</sup> x 2.7 <sup>M</sup> x 2.5 <sup>M</sup>
<b>Weight</b>	Ca. 8 <sup>Kg</sup>
<b>PC Interface</b>	USB 2.0 & USB 3.0
<b>Calibrated Volume</b>	1) 1.0 <sup>M</sup> - 2.5 <sup>M*</sup> (Default) 2) 1.0 <sup>M</sup> - 3.5 <sup>M*</sup> (Optional) 3) 2.2 <sup>M</sup> - 4.7 <sup>M*</sup> (Optional)
<b>Software Interface</b>	3D TubeCAD (Coming Soon)   Power Inspect <sup>®</sup>   Geomagic <sup>®</sup>   3D-Reshaper <sup>®</sup>   Inca 3D   PolyWorks <sup>®</sup>   Point Master   Rhino   Solid-Works - RevWorks <sup>®</sup>   HighRES   Mercator   Eureka - Roboris
<b>Measurement Tool</b>	PRECI 3D GUN   ID-2D-3D PRECI SCAN   Custom Tools
<b>Number Of Ports</b>	2 Wired (4 Max.)   2 Wireless
<b>Poly PRECI Trackers</b>	0.Master - 1.Slave - 2.Slave - 3.Slave...n (For Complex & Big Sized Parts)
<b>Working Temperature</b>	> 16 <sup>°C</sup> to < 35 <sup>°C</sup>
<b>Transport</b>	Specially Designed Protective Case

## PRECI 3D GUN

<b>IR Sensors</b>	18 PGM
<b>Communication</b>	Wire-Less (RF - Radio Frequency)
<b>Faces</b>	3-Sides (Auto Select Banking)
<b>Tip</b>	M5 Ruby Ball & Sharp Tip
<b>Buttons</b>	2 Ergonomic Buttons (3 Max.)
<b>Power</b>	Compact Mobile Charger
<b>Working Time</b>	> 6 <sup>hr</sup> @ Fully Charged Battery*
<b>Calibration</b>	Only Factory Calibration (User Calibration Correction Module Available)*
<b>Transport</b>	Specially Designed Protective Case
<b>Add-On Module</b>	Infrared Non-Contact Fork - Module*

\* Fork Module: espe. For Tube Inspection

PreciTrack3D GmbH

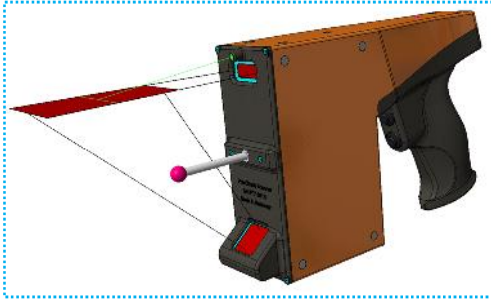
Kreuzstraße 81 | D - 85716 Unterschleißheim

Phone: +49-89-54 80 94 87 | Fax: +49-89-54 80 94 89

info@pt3d.de | www.pt3d.de

# PRECI 3D SCAN

PRECI 3D SCAN

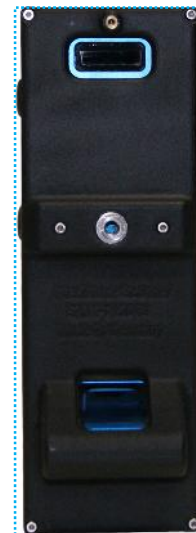


## PRECI 3D SCAN<sup>80/40</sup>

<b>Resolution</b>	Z <sup>*</sup> : 0.045 <sup>mm</sup> X <sup>*</sup> : 0.140 <sup>mm</sup>
<b>Accuracy</b>	0.05 <sup>mm</sup> *
<b>Start   End Measurement Range</b>	X : 40 <sup>mm</sup>   55 <sup>mm</sup> Z : 63 <sup>mm</sup>   143 <sup>mm</sup>
<b>Measurement Range</b>	Z : 80 <sup>mm</sup>
<b>Laser Class</b>	1) 2M (Default) 2) 3R(Optional)
<b>Light Source</b>	420 <sup>nm</sup> <b>Blue</b>
<b>Points/Seconds</b>	20,000
<b>Speed</b>	70 <sup>Hz</sup>
<b>Surface</b>	White to Black Dull to Shiny Surface
<b>Software Interface</b>	3D Reshaper <sup>®</sup>   Geomagic <sup>®</sup>   PowerInspect <sup>®</sup>   Point Master <sup>®</sup>   PolyWorks <sup>®</sup>
<b>PC Interface</b>	Ethernet   USB (2.0   3.0)
<b>Working Temperature Range</b>	> 16 <sup>°C</sup> to < 35 <sup>°C</sup>
<b>Transport</b>	Specially Designed Protective Case

\* Scanner Accuracy

- 3D Real Time Scanning
- 3D Inspection & CAD Comparison
- Reverse Engineering
- 3D Touch Probe Function
- Automated Calibration Process



PreciTrack3D GmbH

Kreuzstraße 81 | D - 85716 Unterschleißheim

Phone: +49-89-54 80 94 87 | Fax: +49-89-54 80 94 89

info@pt3d.de | www.pt3d.de

# PRECI 3D ROBOGUN

PRECI 3D ROBOGUN



- Multi Faces Flexibility
- Intelligent Auto Face-Selection
- Light Weight
- Robust & Easy Handling
- Easy Calibration Correction
- Robot Path Planning & Programming
- Real-Time Welding Process Path Teaching & Simulation

PRECI 3D ROBOGUN	
<b>IR Sensors</b>	20 PGM*
<b>Communication</b>	Wire-Less (RF - Radio Frequency)
<b>Faces</b>	8-Sides (Auto Select Banking)
<b>Tip</b>	Robot Welding-Torch Connection & M5 Ruby Ball & Sharp Tip
<b>Buttons</b>	6 Ergonomic Buttons (7 Max.)
<b>Power</b>	Compact Mobile Charger
<b>Working Time</b>	> 5 <sup>hr</sup> @ Fully Charged Battery*
<b>Calibration</b>	Only Factory Calibration (User Calibration Correction Module Available)*
<b>Software</b>	Mercator - Sikora GmbH SKM DCAM - SKM Informatik
<b>Transport</b>	Specially Designed Protective Case
<b>Add-On Module</b>	Robot Welding-Torch



PreciTrack3D GmbH

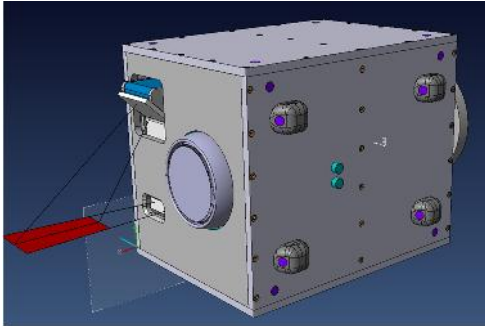
Kreuzstraße 81 | D - 85716 Unterschleißheim

Phone: +49-89-54 80 94 87 | Fax: +49-89-54 80 94 89

info@pt3d.de | www.pt3d.de

# PRECI 3D CONFOCAL & PRECI 3D REF

## PRECI 3D CONFOCAL



- 3D Real Time Glass Inspection-CAD Comparison
- Each Glass Report in PDF | XLS
- Easy Mounting on Robot Flans
- Automated Calibration Measurement Process
- One Time Robot Path Programming for Each New Glass Model

PRECI 3D CONFOCAL <sup>30</sup>	
<b>Linearity (Displacement Measurement)</b>	1D - Up to 7.5 <sup>μm</sup> (2 ) <sup>*</sup> 2D - Up to 60 <sup>μm</sup> (2 ) <sup>*</sup>
<b>Linearity (Thickness Measurement)</b>	1D - Up to 16 <sup>μm</sup> (2 ) <sup>*</sup> 2D - Up to 70 <sup>μm</sup> (2 ) <sup>*</sup>
<b>Start of Measurement Range</b>	100 <sup>mm</sup>
<b>Measurement Range</b>	30 <sup>mm</sup>
<b>Resolution</b>	180 <sup>nm</sup>
<b>Spot Diameter</b>	50 <sup>μm</sup>
<b>Max Tilt<sup>*</sup></b>	±9°
<b>Speed</b>	Ca. 150 <sup>Hz</sup> (Single Point @ ca. < 7 <sup>mSec</sup> )
<b>Weight</b>	780 <sup>g</sup>
<b>Software Interface</b>	3D Reshaper <sup>®</sup>   Power Inspect <sup>®</sup>   Geomagic <sup>®</sup>
<b>PC Interface</b>	Ethernet   USB (2.0   3.0)
<b>Poly PRECI Trackers</b>	0.Master - 1.Slave - 2.Slave - 3.Slave...n (For Complex & Big Sized Parts)
<b>Working Temperature</b>	> 16 <sup>°C</sup> to < 35 <sup>°C</sup>
<b>Transport</b>	Protective Case

**Recommendation: To Use Industrial Robot with PRECI CONFOCAL<sup>30</sup> to Inspect and Measure Glass for Most Productive & Ergonomic Solution**

## PRECI 3D REF



- Dynamic Referencing
- Desktop Measurement Tool
- Light Weight & Easy Mount
- Robot Tracking Applications
- Automated Calibration Process

PRECI 3D REF	
<b>IR Sensors</b>	4 IR Sensors <sup>*</sup>
<b>Communication</b>	Wired   Wire-Less (RF - Radio Frequency)
<b>Faces</b>	Single Sides
<b>Tip</b>	M5 Ruby Ball & Sharp Tip
<b>Buttons</b>	2 Ergonomic Buttons
<b>Speed</b>	~ 200 Hz
<b>Calibration</b>	Only Factory Calibration (User Calibration Correction Module Available) <sup>*</sup>
<b>Weight</b>	< 0.2 Kg
<b>Add-On</b>	Multiple PRECI 3D REF , PRECI 3D GUN, PRECI 3D ROBOGUN

PreciTrack3D GmbH

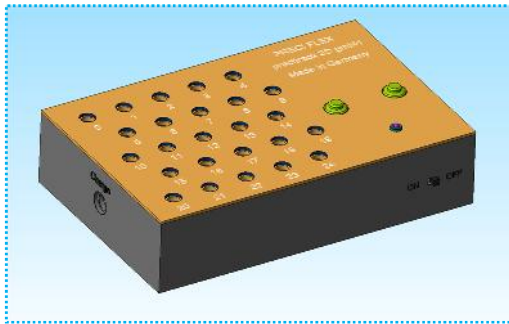
Kreuzstraße 81 | D - 85716 Unterschleißheim

Phone: +49-89-54 80 94 87 | Fax: +49-89-54 80 94 89

info@pt3d.de | www.pt3d.de

# PRECI 3D FELX

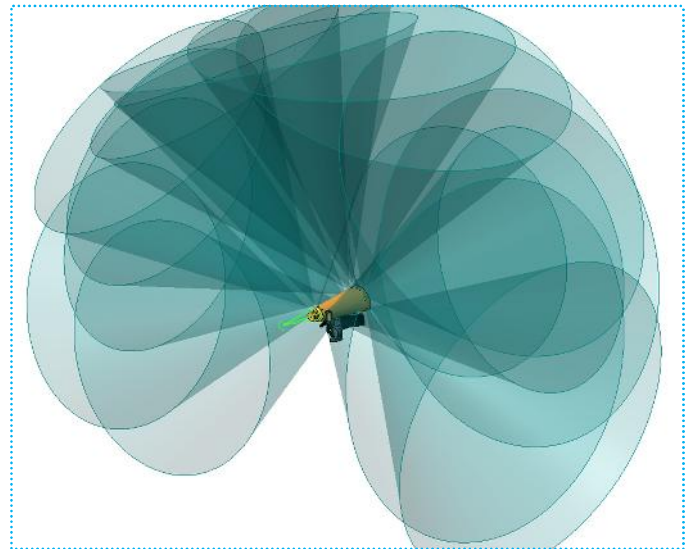
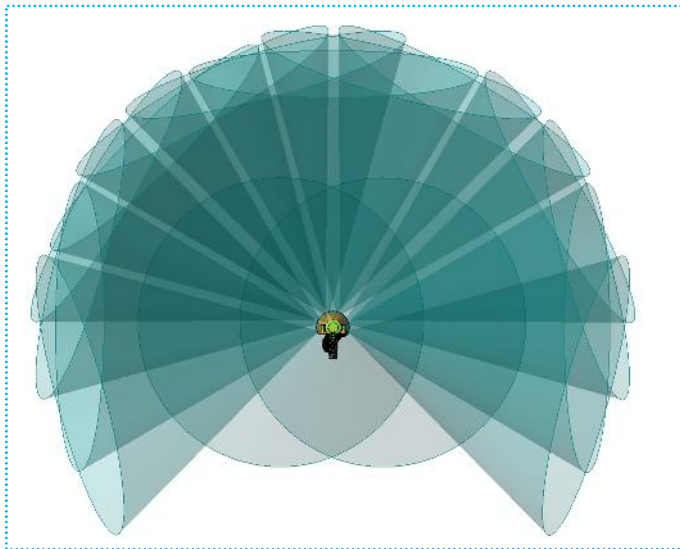
PRECI 3D FLEX



PRECI 3D FLEX	
<b>FLEX IR Sensors</b>	Min. 1 - Max. 25
<b>PRECI 3D BOX</b>	25 x 2.5mm Receptacle, 2 - Buttons, Battery <sup>1</sup> , Charge Plug, Status LED, Power Switch
<b>Communication</b>	Wired (Length: 10m)/ Wireless <sup>1</sup>
<b>Connection</b>	2.5mm Standard Jack with ~1.8 m Cable
<b>Placement</b>	Magnet / double sided adhesive tape
<b>Speed</b>	~1.1 msec / Sensor
<b>Accuracy</b>	30 <sup>th</sup> Single Point
<b>Working Temperature</b>	> 16°C to < 35°C

Real Time Dynamic 3D-Tracking

PRECI 3D ROBOGUN CLOUD



TRANSPORT CASE



- Robust & Modern Custom Design
- Shock Resistance Finished Form
- 3 Sides Carrying Handle
- Roller for Easy Pulling
- Total Weight ~15Kg (Inc. All Hardware)
- 1136mm L x 350mm B x 135mm H

PreciTrack3D GmbH

Kreuzstraße 81 | D - 85716 Unterschleißheim

Phone: +49-89-54 80 94 87 | Fax: +49-89-54 80 94 89

info@pt3d.de | www.pt3d.de