



# OPTOTRAK CERTUS™

## COMPARISON OF OPTOTRAK CERTUS TO OPTOTRAK 3020

The Optotrak Certus System expands on the capabilities of the Optotrak 3020 System while retaining backwards compatibility to the Optotrak 3020 System.

### HIGHLIGHTS OF THE OPTOTRAK CERTUS SYSTEM COMPARED TO THE OPTOTRAK 3020

Feature	Optotrak Certus System	Optotrak 3020 System
Maximum Number of Markers	512	256
Maximum Sampling Rates (Marker Frequency)	4600 Hz	3500 Hz
Maximum Frame Rate (Hz) N = number of markers	$\frac{4600}{N + 2}$	$\frac{3500}{N + 1}$
Accuracy	0.1 mm*	0.1 mm*
Resolution	0.01 mm*	0.01 mm*
Strober Ports	3	4
Strober Types	Marker strober Axon strober Tool strober 3020 strober adapter	6-Channel strober 16-Channel strober 24-Channel strober
Dimensions - Position Sensor	1126 x 200 x 161 mm	1110 x 315 x 215 mm
Dimensions - System Control Unit	297 x 236 x 91 mm	483 x 373 x 138 mm
Dimensions - System Control Unit (e-type)**	297 x 236 x 135 mm	not applicable
Weight - Position Sensor	18 kg	36.4 kg
Weight - System Control Unit	3.4 kg	11.4 kg
Weight - System Control Unit (e-type)**	5 kg	not applicable
Mounting Options	Econo-stand Brunson stand Wall bracket Vertical adapter Multi-axis head	Wall bracket Vertical stand
Maximum Number of Rigid Bodies (assuming 3 markers/rigid body)	170	85
Rigid Body Features	Imaginary markers Switches Visible LED Smart tools	Imaginary markers
Number of Position Sensors that can be used simultaneously	8	8
Host computer connection	PCI Ethernet 10/100 Mbps SCSI	PCI SCSI ISA

\*at 2.25 m distance

\*\* intended for applications that require type BF isolation

## COMPARISON OF OPTOTRAK CERTUS STROBERS AND OPTOTRAK 3020 STROBERS

Optotrak Certus Strobers		Optotrak 3020 Strobers	
Strober(s)	Feature	Strober	Feature
Marker, Tool, and Axon Strobers	Marker activation order configurable within software	6-Channel Strober	Supports up to 6 markers with a Lemo connector
	Two input switches		
Axon and Tool Strobers	Support tools with SROM files	16-Channel Strober	Supports up to 16 markers with twisted pair cables connected to a terminal within the strober
Axon Strober	DB25 connector supports up to 80 markers and customizable tool combinations		
Tool Strober	10-pin connector ports support 4 SROM tools with up to 20 markers each	24-Channel Strober	Supports up to 24 markers via a DB25 connector
Marker Strober	RJH connectors support up to 24 markers		
3020 Strober Adaptor	Allows Optotrak 3020 strobers to be used with Certus System		

## THE COMPANY

Established more than 20 years ago, NDI is trusted by international leaders in medicine, industry and research for the accuracy and reliability of its measurement technology. NDI systems are used in applications from computer-assisted therapy to aeronautics; from quality inspection to human motion research. Today, the company is a world leader in advanced 3D measurement technology with over 5,000 optical installations in more than 25 countries around the world.



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