



Technical data

sensALIGN™ sensor



CPU and memory	ARM Cortex™ M3 and 2GB Flash memory
Environmental protection	IP 65 (dustproof and water jet resistant), shockproof
Relative humidity	10% to 90%
Ambient light protection	Optical and active electronic digital compensation
Operating temperature	-10°C to 50°C
Measurement range	Unlimited, dynamically extendible (U.S. Pat. 6,040,903)
Measurement resolution	1 μm
Measurement error	< 1.0%
Vibration measurement	mm/s, RMS, 10 Hz to 1 kHz, 0 mm/s – 5000/f • mm/s² (f in Hertz [1/s])
Inclinometer resolution	0.1°
Inclinometer error	± 0.25% full scale
External interface	Integrated Bluetooth® Class 1 wireless communication, RS232, RS485, I-Data
LED indicators	4 x LED for laser adjustment, 2 LEDs for Bluetooth® communication and battery status
Operating time	12 hours continuous use
Power supply	Lithium Polymer rechargeable battery 3.7 V / 1.6 Ah / 6 Wh.
Dimensions	Approx. 103 x 84 x 60 mm
Weight	Approx. 310 g

sensALIGN™ laser



Type	InGaAlP semiconductor laser
Beam divergence	0.3 mrad
Environmental protection	IP 65 (dustproof and water jet resistant), shockproof
Relative humidity	10% to 90%
Beam power	< 1mW
Wavelength (typical)	635 nm (red, highly visible)
Safety class and precautions	Class 2, IEC 60825-1:2007 Do not stare into laser beam
Operating temperature	-10°C to 50°C
Inclinometer resolution	0.1°
Inclinometer error	± 0.25% full scale
LED indicator	2 LEDs for battery status and laser transmission
Operating time	70 hours continuous use
Power supply	Lithium Polymer rechargeable battery 3.7 V / 1.6 Ah / 6 Wh.
Dimensions	Approx. 103 x 84 x 60 mm
Weight	Approx. 330 g

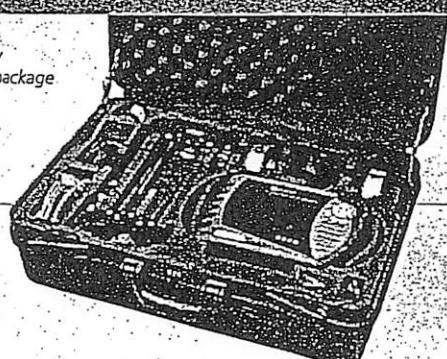
ROTAALIGN™ Ultra IS Technical data



CPU	Intel XScale Processor running at 520 MHz
Memory	64 MB RAM, 64 MB Internal Flash, : 1024 MB Compact Flash Memory
Display	Type: Transmissive (sunlight-readable) backlit TFT color graphic display
	Resolution: Full VGA, 640 x 480 pixels; Dimensions: 145 mm/ 5.7 inch diagonal
	Keyboard elements: navigation cursor cross with up, clear and menu keys; Alphanumeric keyboard with dimensions, measure and results hard keys
LED indicators	4 LEDs for laser status and alignment condition
	2 LEDs for wireless communication and battery status
Power supply	Operating time: 25 hours (using Li-Ion rechargeable battery), 12 hours (using disposable batteries) typical use (based upon an operating cycle of 25% measurement, 25% computation and 50% 'sleep' mode)
	Lithium-Ion rechargeable battery: 7.2 V / 6,0 Ah
	Disposable batteries: 6 x 1.5 V IEC LR14 ("C") [optional]
External interface	2 x USB host for printer, keyboard or PC communication
	1 x USB slave for printer, keyboard or PC communication
	RS232 (serial) for receiver
	I-Data socket for receiver
Ethernet	Integrated Bluetooth® wireless communication, Class 1, transmitting power 100mW
AC adapter/charger socket	
Environmental protection	IP 65 (dustproof and water spray resistant), shockproof
	Relative humidity 10% to 90%
Temperature range	Operation: 0°C to 45°C [32°F to 113°F] Storage: -20°C to 60°C [-4°F to 140°F]
Dimensions	Approx. 243 x 172 x 61 mm [9 9/16" x 6 5/16" x 2 3/8"]
Weight	1 kg (without battery)
CE conformity	EC guidelines for electric devices (2004/108 EEC) are fulfilled

ROTAALIGN™ Ultra IS case

Contents may vary
depending upon package ordered



P: 3/3

Three packages: Lite - Advanced - Expert

Lite

High resolution color backlit TFT screen – 145 mm / 5.7 inch diagonal and backlit alphanumeric keyboard

USB interface for PC and printer

Heavy-duty Li-Ion rechargeable battery

Rigid pre-assembled universal brackets and additional support posts included in a pouch

UniBeam® – patented single laser-sensor technology for quick laser adjustment

Integrated electronic inclinometer

Alignment of horizontal, vertical and flanged-mounted machines

Alignment of coupled / non-coupled and rotatable / non-rotatable machines

Alignment of cardan and spacer shafts (cardan requires a special bracket)

Machine train alignment up to 6 machines

Soft foot measurement and correction

User-defined tolerances

TolChék® – automatic evaluation of alignment condition with 'Smiley' and LEDs

Variety of measurement modes: SWEEP, Static, Multipoint and Dial gauge inputs

InfiniRange® extends detector measurement range to handle gross misalignment

Live monitoring of horizontal and vertical corrections – Live Move

Move simulator

Static feet selection to resolve base-bound and bolt-bound problems

Realistic machine graphics which can be designated

Save thousands of measurement files in the device

Save reports as PDFs directly to memory stick

Data protection - auto save and resume capability

In compliance with IP 65 classifications

PC display for presentations/training in customer premises

Platform prepared for other alignment applications like Straightness, Flatness and Bore concentricity measurement

ROTALIGN® Ultra iS is based on a three-level system. The basic Lite version is packed with powerful features that include the Move Simulator and user-defined tolerances. This version is easily upgradable to the Advanced version to include the intelligent features and the powerful analysis tools. The system can be extended to the Expert level by adding 'Live Trend' and/or the multiple coupling application.

Advanced

Intelligence features

Vibration acceptance check without extra accessories

Live simultaneous Move in both horizontal and vertical directions

Soft foot wizard

Machine train up to 14 machines

Measurement Pass mode

Standard Deviation

Editable ellipse

Thermal growth calculator

Under/over-constrained feet

File/Machine templates

Vector tolerances

History table

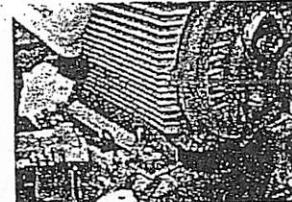
RFID Machine Identification

Expert

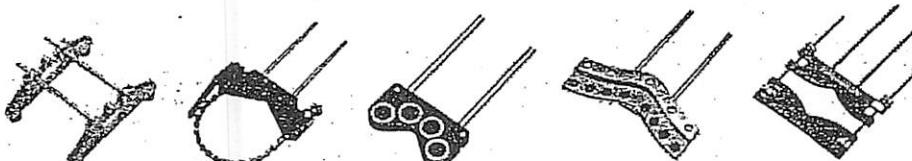
'Live Trend' with magnetic or permanent fixation brackets

Multiple coupling measurement

Optional: shims (left) and a lifter unit to lift machine to insert or remove shims



Optional: Different mounting brackets for different applications



Optional: Move assist

