



АЕЦ Козлодуй ЕАД BG - 3321 Козлодуй

04.09.2019

Реф.: Покана за пазарни консултации № 41850



СПМ Инструмент България ЕООД

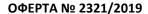
Заличено на основание чл. 2 от ЗЗЛД

0

Добромир Добрев

България

BIC UNCRBGSF, сметка: IBAN BG95 UNCR 7630 1076 3312 88





АЕЦ Козлодуй ЕАД BG - 3321 Козлодуй

04.09.2019

Реф.: Покана за пазарни консултации № 41850

#### Лазерна система за безжично центроване на помпени агрегати с линейни лазери, Bluetooth® комуникация и безплатно приложение Easy-Laser® XT Alianment App за телефон и таблет линейни лазери / 1-осови вертикални детектори (измервателна дистанция - 10 т) Кат. № Бр. Наименование **BGN** 12-0967 **Лазерна система Easy-Laser® XT440 Shaft с дисплеен модул,** включва: 1 12-0961 1 Дисплеен модул XT11, 9 програми/функции **EASY-LASER** 12-0943 1 Лазерна измервателна единица XT40-M / 1-осов детектор, 30mm, IP66 12-0944 Лазерна измервателна единица XT40-S / 1-осов детектор, 30mm, IP66 1 12-0963 V - образна конзола с верига (за D < 120 mm) и монтажни шпилки 2 12-0059 Комплект удължителни монтажни шпилки 4 x 60 mm 1 05-0833 1 Кратка инструкция за ползване - английски език 03-0824 1 Измервателна ролетка, 3 m 03-0914 1 USB памет 2GB с документация Зарядно устройство за системи XT, 220 V AC 03-1256 1 12-0989 Разклонителен кабел за зареждане на лазерните единици, ос 1 03-0967 Комплект шестограмни ключове 1 12-0991 1 Папка с документи 12-0997 1 Ремък за дисплейната единица XT11 12-0751 1 Преходник DC към USB за зареждане на лазерните единици 03-0878 Кърпичка за почистване на оптиката 1 12-0973 Пластмасов куфар за XT440, среден (460x350x175mm) с формовани отделения 1 (без ДДС), BGN: 15 060,00 Цена за комплект Приложението за центроване Easy-Laser® XT Alignment App се изтегля безплатно за операционни системи iOS и Android om App Store и Google Play за инсталация на мобилен телефон и таблет.

Условия на доставка и плащане		
Цена:	Посочената цена е в Лева (BGN) и не включва ДДС	
Франкировка:	DDP Козлодуй EAД	
Срок на доставка:	До 6 седмици след официална заявка	
Плащане:	До 30 календарни дни от датата на приемане на доставката	
Гаранционен срок:	1 година от датата на доставка	
Документи:	Сертификат за качество, Декларация за произход, Инструкция за експлоатация и съхранение	
Банкови реквизити:	УниКредит Булбанк АД, Клон Варна, BIC UNCRBGSF IBAN: BG95 UNCR 7630 1076 3312 88 - в лева	
ЕИК:	813000620	
ИН по ДДС:	BG 813000620	
Тел:	052-600 805; 0888 623 631	
Факс:	052-600 333	
Е-поща:	spm.office@smbox.contact.bg	
Лице за контакт:	Инж. Добромир Димов Добрев	
Валидност:	90 дни от датата на офериране	

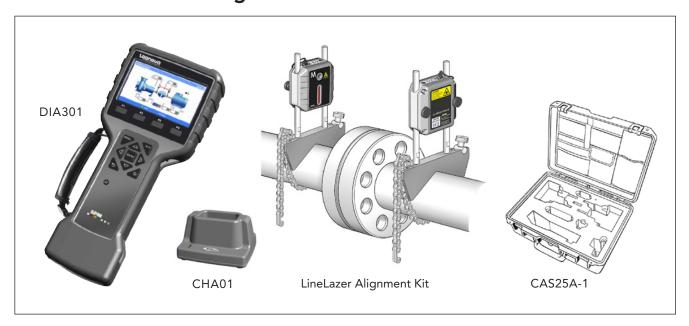
СПМ Инструмент България ЕООД

Заличено на основание чл. 2 от ЗЗЛД

Добромир Добрев

BIC UNCRBGSF, сметка: IBAN BG95 UNCR 7630 1076 3312 88

## Leonova Diamond® Aligner



Leonova Diamond Aligner Kit DIA750 is a complete kit of equipment for shaft alignment. The kit contains instrument, alignment sensors, brackets, chains, rods, cables and a tape measure, all in a carrying case. This kit fits a multitude of applications, e.g. compressors, gearboxes, generators, and pumps.

The alignment sensors use high precision digital CMOS linear image detectors. Compensation values for thermal growth can be input. High precision inclinometers measure the angle of rotation of both alignment sensors at all times. This allows measurement in fully automatic mode, with much less than a half-turn of the shaft. Measurement results are displayed in 100ths of millimetres or 1000ths of an inch.

The Leonova instrument is the control and display unit. A user-friendly graphical interface guides the user through the entire alignment procedure. Automatic calculations and instant correction and alignment data result in a perfect shaft alignment. Leonova produces a log file with all alignment data for printing a report.

### Measurement programs:

- Alignment of horizontally mounted machines (automatic measurement or manual prompts)
- Alignment of vertically and flange mounted machines
- Soft foot measurement
- Compensation for thermal growth
- Feet lock function
- Shaft alignment log

Patents: DE#60304328.3 - US#7,054,761 - US#7,167.814 - US#7,200.519 - US#7,301,616 - US#7,313,484 US#7,324,919 - US#7,711,519 - US#7,714,166 - DE#60336383.0 - US#7,949,496 - DE#60337804.8 GB#1474662 - GB#1474663 - DE#60338365.3 - ZA#2011/04946 - SE#0951017.3 - DE#60337804.8 GB#1474669 - SE#1000631-0 - US#8,762,104 - US#8,812,265 - US#8,810,396 - CN#ZL200980155994.1 CN#ZL201080019737.8 - KZ#020791 - RU#20209330744 - RU#021908 - KZ#021908 US#9,200,960 - US#9,279,761 - CN#ZL201180006321.7 - KZ#022630 - RU#022503 - US#9,279,715 US#9,304,033 - KZ#024339 - RU#024339 - CN#ZL201380007381 X - AU#2015203801 - AU#2013215672 RU#2014737 - CN#ZL2012800347548 - US#6,273,931 - DE#60203021988.5 - DKK/F/FR/IT/NL/NO/ES/GB#2810027 - SE#13744257.0 - AU#2015203361 - RU#027452 - GB#2505984 - US#9,777,2,219

### Leonova Diamond Aligner Kit DIA750

DIA 301	Leonova Diamond Aligner, incl. wrist strap
CHA01	Battery charger incl. AC adapter, 100-240V AC
LLA450	LineLazer Alignment Kit (see below)
71980B	User Guide 'Leonova Diamond Aligner'

LineLazer Alignment Kit LLA450 (see TD-525)				
LLS10	1 pc.	Alignment sensor, S position (see TD-524)		
LLM10	1 pc.	Alignment sensor, M position (see TD-524)		
90624	1 pc.	Charger, dual USB, incl. interchangeble		
		AC plugs, 100-240V AC, 50-60Hz, 17W		
CAB94	2 pcs.	Charger cable, USB type A to Mini-B USB,		
		length 1.5 m		
LLD10	1 pc.	Bluetooth dongle for Leonova Diamond		
LLB25	2 pcs.	Shaft bracket for chain		
LLB11	2 pcs.	Extension chain, length 1000 mm		
LLB12	2 pcs.	Chain with tension adapter, length 500 mm		
LLB13	1 set	Supporting rod, 80 mm, set of 4		
LLB14	1 set	Supporting rod, 150 mm, set of 4		
MAA70	1 pc.	Tape measure		
TOL21	1 pc.	Torquing tool for chains and rods		
81339	1 pc.	Plastic box		
CAS25A-1	1 pc.	Carrying case, plastic with foam insert		

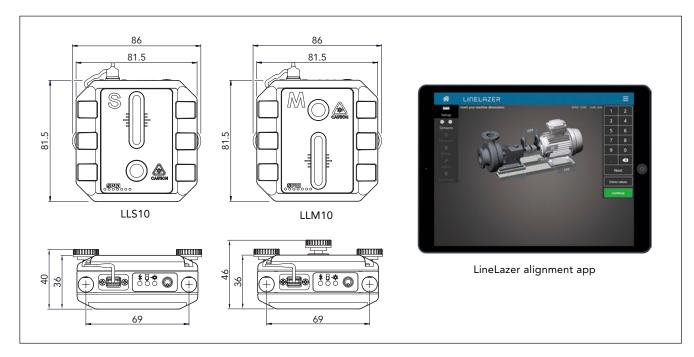
### **Options**

16573	Optional battery pack for Leonova
16644	Battery adapter unit for Leonova
93484	Car charger cable 12V for Leonova
16675	Belt clip for Leonova, complete
16646	Shoulder strap with safety buckle
81469	Silica gel (moisture absorbent) spare for CAS25 A-1
81468	Code lock, TSA approved, for CAS25A-1
LLB26	Magnetic bracket

spare p	drts
LLB20	Supporting rod, 80 mm
LLB21	Supporting rod, 150 mm
16645	Protection foil for instrument display
14661	Wrist strap for Leonova
90362	AC adapter for Leonova, Euro plug, 100-240 V AC
PRO52	Leonova Service Program



## LineLazer alignment sensors



The alignment sensors LLS10 and LLM10 are two measuring units for shaft alignment either with the multi-function datalogger Leonova Diamond or with the LineLazer app. The alignment sensors are identical with exception of the position of laser detector and the knob for adjustment of the laser on the alignment sensor marked M. The sensors communicate wirelessly with Leonova Diamond and the LineLazer app via Bluetooth.

The alignment sensors provide maximum accuracy using a spread laser beam in combination with a 28.7 mm detector. Through digital filtering, the laser beam can be distinguished from interfering light sources. Both alignment sensors are transmitters/detectors.

The alignment sensors have dual axis high precision inclinometers which measure the angle of rotation of both alignment sensors at all times. This allows measurement in fully automatic mode, with much less than a half-turn of the shaft. Measurement results are displayed in 100ths of millimetres or 1000ths of an inch.

The alignment sensor control panel has LED indicators showing battery status and communication mode. The batteries are recharged with the USB charger 90624.

The LineLazer app guides the user through the alignment process in an intuitive way. With a visually appealing interface, it provides straightforward guidance to the feet corrections necessary to achieve a perfectly aligned machine. The app is free to download from App Store and Google Play, and can also be used in an Windows environment.

The LineLazer alignment kit (see TD-525) contains alignment sensors, brackets, chains, rods, battery charger, cables, Bluetooth dongle and a tape measure – all in a convenient carrying case. This kit fits a multitude of applications, e.g. compressors, gearboxes, generators and pumps.

### **Technical specifications**

Laser type: line laser, visible red light

 $\begin{array}{lll} \text{Laser output power:} & \leq 1 \text{ mW} \\ \text{Laser safety class:} & \text{Class II} \\ \text{Laser wavelength:} & 635 \text{ nm (Typ.)} \\ \end{array}$ 

Detector type: CMOS Linear image sensor

Detector resolution:  $7 \mu m$ 

Detector accuracy:  $\leq 0.3\% \pm 7 \mu m$ 

Detector protection: optical filtering (from ambient light)

Detector size (length): approx. 28.7 mm (≈ 1.13 in)

Measuring range: up to 10m (32.8 ft)

Inclinometer type: MEMS Inclinometer resolution: 0.01° Inclinometer accuracy:  $\leq \pm 0.2^{\circ}$ 

Firmware: built in self diagnosis and functions

for calibration, signal processing

Internal batteries: Li-ion, rechargable
Operating time: > 12 hours normal use
Operating temp.: -10 to +50 °C (14 to 122 °F)

Keyboard: sealed membrane
Control indicators: LED, red/yellow/blue

Connector type: mini-B USB for communication and

battery charge

Communication: Bluetooth v4.0 Class II

Housing: PC plastic/anodized aluminium

Protection: IP65

Dimensions: LLS10; 86x81.5x40mm

(3.4x3.2x1.6 in)

LLM10; 86x81.5x46mm

(3.4x3.2x1.8 in)

Weight: approx. 230 g

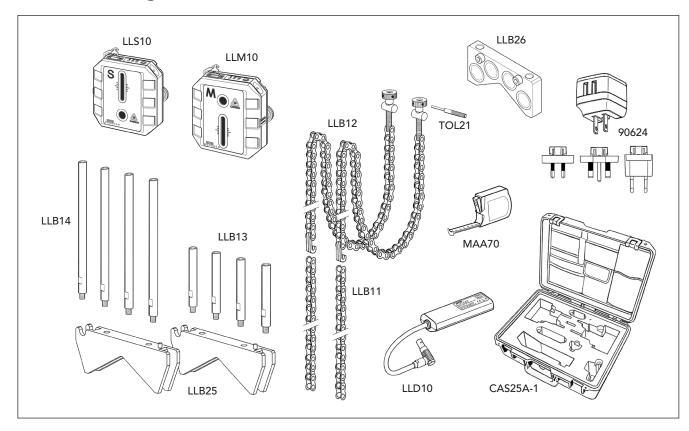
### Part numbers

LLA450 LineLazer alignment kit for Leonova Diamond LLA451 LineLazer alignment kit for Leonova Diamond,

without carrying case



## LineLazer Alignment Kit



The LineLazer Alignment Kit LLA450 contains alignment sensors, brackets, chains, rods, battery charger, cables, Bluetooth dongle and a tape measure – all in a convenient carrying case. This kit fits a multitude of applications, e.g. compressors, gearboxes, generators, and pumps. Compensation values for thermal growth can be input.

High precision inclinometers measure the angle of rotation of both detector units at all times. This allows measurement in fully automatic mode, with much less than a half-turn of the shaft. Measurement results are displayed in 100ths of millimetres or 1000ths of an inch. Specifications for the alignment sensors, see TD-524.

### LineLazer Alignment Kit LLA 450 for Leonova Diamond

LLS10	1 pc. Alignment sensor, S position (see TD-524)	LLB14 1 set Supporting rod, 150 mm, set of 4
LLM10	1 pc. Alignment sensor, M position (see TD-524)	MAA70 1 pc. Tape measure
90624	1 pc. Charger, dual USB, incl. interchangeble	TOL21 1 pc. Torquing tool for chains and rods
	AC plugs, 100–240V AC, 50-60 Hz, 17 W	81339 1 pc. Plastic box
CAB94	2 pcs. Charger cable, USB Type A to Mini-B USB, length 1.5 m	CAS25A-1 1 pc. Carrying case, plastic with foam insert
LLD10	1 pc. Bluetooth dongle for Leonova Diamond	Options
LLB25	2 pcs. Shaft bracket for chain	LLB26 Magnetic bracket
LLB11	2 pcs. Extension chain, length 1000 mm	Spare parts
LLB12	2 pcs. Chain with tension adapter, length	LLB20 Supporting rod, 80 mm
	500 mm	LLB21 Supporting rod, 150 mm
LLB13	1 set Supporting rod, 80 mm, set of 4	LEBET Supporting roa, 130 mm

### LineLazer Alignment Kit LLA451 for Leonova Diamond

The LineLazer Alignment Kit LLA451 contains the same equipment as LLA450 but without the carrying case CAS25A-1.



Can high-performance equipment for shaft alignment really come at a low cost?

Yes it can.



**EXCLUSIVE PACKAGE DISCOUNTS** on the sophisticated Leonova Diamond<sup>®</sup> Aligner system.







## **EFFICIENT AND USER FRIENDLY SHAFT ALIGNMENT**

With this special offer on the new Leonova Diamond<sup>®</sup> Aligner system, there has never been a better time to upgrade to a high-performance alignment solution. Leonova Diamond Aligner is a system for quick and reliable shaft alignment, suitable for most combinations of machinery and coupled or uncoupled shafts. A spin-off of the successful and patented Leonova Diamond instrument, this system is designed for tough environments.

The dual laser system package comes with large, high-precision digital CMOS linear image sensors, providing maximum accuracy. The sensors communicate with Leonova Diamond Aligner via Bluetooth, enabling hassle-free shaft alignment.

## Aligner Package

- Leonova Diamond Aligner handheld instrument with
  - Charger
  - Communication cable
  - Service software for reporting
- LineLazer Alignment kit, including:
  - Alignment sensors
  - Charger for sensors
  - Bluetooth dongle
  - Shaft bracket and chains
  - Tape measure
  - Necessary tools
  - Carrying case, hard

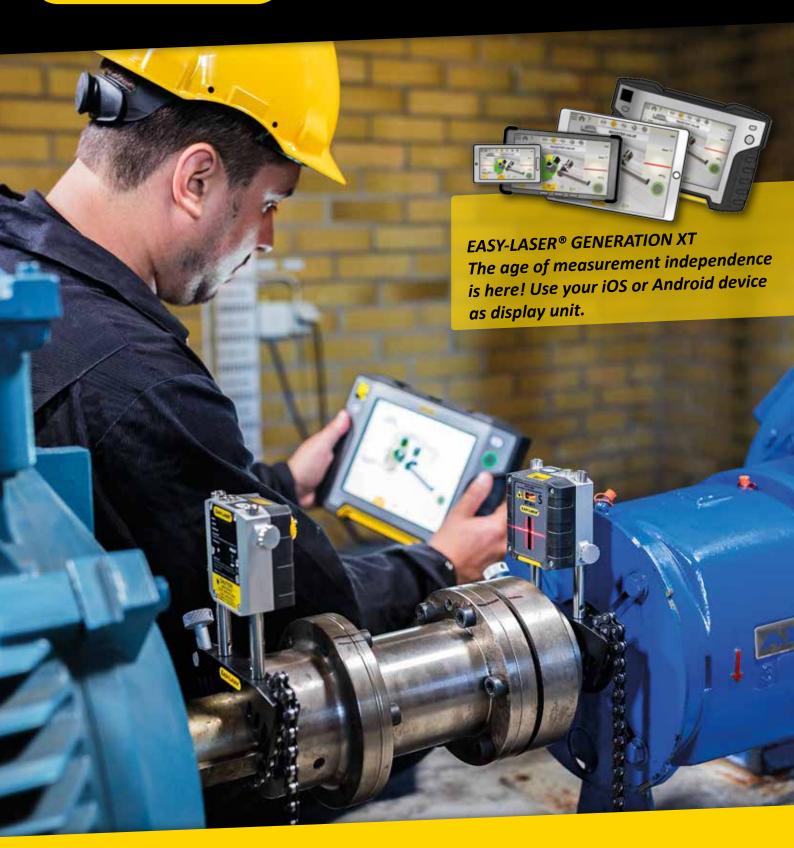




The LineLazer kit for Leonova Diamond Aligner is complete with instrument, alignment sensors, brackets, chains, rods, cables, and tape measure, all in an IP67 carrying case.













**Shaft Alignment** 

**XT**440

## MEASUREMENT INDEPENDENCE tif ti -(111 II THE 21 Itt:u UNA Built. **EASY-LASER® GENERATION XT** Steeter Easy-Laser® XT440 is the first member of our Generation XT alignment systems, built \*\*\*\*\*\* upon our new cross-platform technology. You can now display the data on a multitude \*\*\*\*\*\*\* of different handheld devices, giving you the freedom to work with the gear that suits you BBHHHH: the best. Simply download our straightforward XT application for free and you have all the mm measurement programs you need. RHITT **NO LOCK-INS** With Generation XT you decide if you want the rugged and user-friendly Easy-Laser® XT11 display unit to be included or not. The app also runs on your iOS® or Android® device\*, be it a tablet or a phone, meaning you are never locked in to a specific way of working. **NO LICENSE HASSLE** With Generation XT the measuring units run the show! What they can do, the XT Alignment app will allow you to do too. No hassle with licenses to unlock new features in the app. If you have the hardware, you can use all of its capacity. That is straightforward! \*Conditions apply **MAXIMUM FLEXIBILITY!**

# HIGHLIGHTS

### **MAXIMUM FLEXIBILITY**



### **ALL XT PROGRAMS IN ONE FREE APP**

All XT measurement programs included in one straightforward application available for free.



### **DISPLAY DATA ON MULTIPLE PLATFORMS**

Functionality for iOS, Android and Easy-Laser® XT display units.



Buy with or without the new user-friendly Easy-Laser® display unit.



### **MAXIMUM FLEXIBILITY**

Combine several measuring units with the display unit of your choice, or use different display units with one set of measuring units. No license hassle!



### **RUGGED DESIGN**

The XT products are rugged, rated both IP66 and IP67 water and dust proof. For superior durability in harsh environments.



### LONG OPERATING TIMES

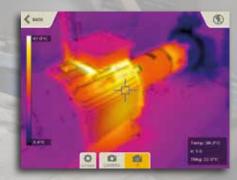
The long operating times of up to 16 hours for the Display unit and 24 hours for the Measuring units means you will now be able to take on and finish the toughest jobs.

## **POWERFUL OPTION**



### THERMAL CAMERA

The Easy-Laser® XT11 Display unit has the option to add a thermal imaging camera (IR) along with the standard 13 MP digital camera. Shoot a thermal image before and after alignment and include with the documentation!



The XT Alignment app runs on iOS and Android devices\*, as well as on the Easy-Laser® XT11 display unit. The choice is yours.

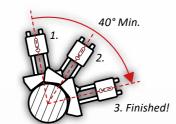
**X**T440

# THIS IS EASY ALIGNMENT

### HORIZONTAL PROGRAM

The user interface is intuitive and guides you through the measurement process. It is animated and zooms in

to the relevant element for each step. You can save the measurements of a machine for As found and As left in the same file.



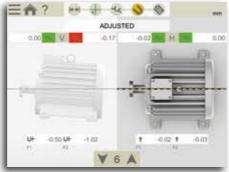
The EasyTurn™ function allows you to begin the measurement process from anywhere on the turn. You can turn the shaft to any three positions with as little as 20° between each position to register the measurement values. Voila! Measurement is complete!



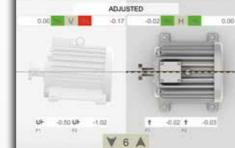
The interactive workflow indicator lets you easily jump to any part in the measurement process.



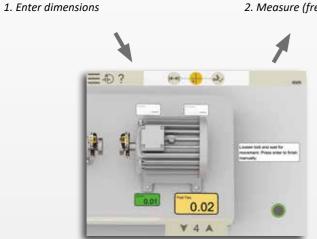




2. Measure (free positions or 9-12-3 o'clock)



3. View result, As found



Soft Foot check



Tolerance check

### **BUILT-IN HELP**

With the Values program you measure и 0.00 но.00 as with dial gauges, but with laser pre-

cision and the possibility to document the measurement result. You can also use it to check bearing play or shaft load.

**VALUES – DIGITAL DIAL INDICATOR** 



Values from measuring units

The app includes a searchable Users Manual which opens the relevant chapter depending where in the process you are. This makes it quick and easy to find the



Easy-to-access built-in manual

answer to your user questions.



5. View report as it will look





Add photos



### THERMAL GROWTH

Automatically compensate for thermal expansion of the machines.



### **SWAP VIEW**

Understand adjustment directions more intuitively.



### **CONTINUE SESSION**

conditions are poor.

pairs of feet.

Your latest measurement is always available, automatically saved.



### **MEASUREMENT VALUE FILTER** Improve readings when measuring

**MULTIPLE SETS OF FEET** Align machines with more than two



**VERTICAL/FLANGE-MOUNTED** MACHINES (Available in 2017)

# **DOCUMENTATION**

### SAVE!



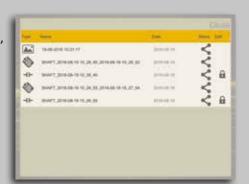
### **INTERNAL MEMORY**

Save your measurement files, photos and reports to the internal memory.



### **VERSATILE FILE TYPES**

Both a PDF and an Excel file are generated.



### **EXPLAIN!**



### **PDF REPORT TEMPLATES**

Use one of the two formats included, or design your own.



### **ADD NOTES**

Explain it a little more.



### **ADD PHOTO**

Show what you mean.



### ADD THERMAL IMAGE <sup>1</sup>

See the difference after alignment.



### SHARE!



### SEND THE REPORTS 2

Share the reports via email with your client, or to e.g. your OneDrive™ file area.



### **SAVE TO USB**

Save your files to USB and copy to other devices.



- <sup>1</sup> Available only with XT11
- <sup>2</sup> Not available with XT11



## **SYSTEM PARTS**

### **XT40-M/S MEASURING UNITS**

The XT40 measuring units have a large 30 mm PSD, and a state-of-the-art OLED display (F) which shows the angle of the unit, making it easier to position it on the shaft. The line laser technology provides a fast setup and easy measurement process. The diagonally positioned locking knobs securely lock the unit on the rods. Rigid aluminium housing provide maximum stability. IP66 and 67, dust- water- and shockproof. Heavy-duty battery for very long operating times; up to 24 hours. Built-in Bluetooth wireless technology.

### **SHAFT BRACKET**

The V-bracket is both light yet rigid, with two rods for maximum stability in all directions. Pre-mounted chain for quick setup on the machine.



- B. Laser angle adjustment (only on M unit)
- C. Charger connector
- D. Laser aperture
- E. PSD apterure
- F. OLED display: battery status/unit angle
- G. Extendable stainless steel rods
- H. Locking knob

### **XT11 DISPLAY UNIT**

Rugged, robust, with wear resistant rubberized protective coating. IP66 and 67, dust- water- and shockproof. As standard a 13 MP camera for documentation is built-in, and you can also choose to add an IR camera to the XT11; shoot a thermal image before and after alignment and include with the documentation! A large 8", glove-enabled touch-screen makes the information clear and the app easy to use. The small OLED display (C) shows battery status of both measuring units and display unit. You can check battery status also when the unit is turned

The clever lock-screen button (B) prevents unintentional clicks, for instance when moving around on the job.

Four fastening points for shoulder strap or customized solutions. Heavy-duty battery for very long operating times; up to 16 hours. The camera can be removed if security reasons require it.



- A. Ergonomically, rubber coated housing
- B. Screen-lock button/Battery status-check button
- C. OLED display
- D. Display brightness sensor
- E. Large and clear 8" glove-enabled touch-screen
- F. Dust cover and protection for connectors (Note: connectors are dust and waterproof)
- G. Enter button

### ACCESSORY BRACKETS

Optional brackets for shaft alignment.



- A. Offset bracket, Part No. 12-1008
- B. Magnetic bracket, Part No. 12-1011
- C. Magnet base, Part No. 12-0013 (Note: offset bracket also needed.)
- D. Sliding bracket, Part No. 12-1010
- E. Extension chain, Part No. 12-0128. Extends the chain for shafts up to diameter 450 mm [17.7"]
- F. Extension rods:

Length 30 mm [1.18"], (x1) Part No. 01-0938 Length 60 mm [2.36"], (x4) Part No. 12-0059 Length 120 mm [4.72"], (x8) Part No. 12-0324 Length 240 mm [9.44"], (x4) Part No. 12-0060

### **TWO CAMERAS**

- A. IR Camera (optional)
- B. 13 Mp Camera
- C. LED Light
- D. Fastening points for shoulder strap (x4)



### **CONNECTORS (DUST AND WATERPROOF)**

- E. Charger
- F. USB A
- G. AV connector (HDMI)
- H. USB B



# **TECHNICAL DATA**

Measuring units XT40-M / XT4	0-S
Type of detector	TruePSD 30 mm [1.2"]
Communication	Bluetooth® wireless technology
Battery type	Heavy duty Li Ion chargeable
Operating time	Up to 24 h continuously
Resolution	0.001 mm [0.05 mils]
Measuring errors	<1%
Measurement range	Up to 10 m [33 feet]
Type of laser	Diode laser
Laser wavelength	635–670 nm
Laser class	Safety class 2
Laser output	<1 mW
Electronic inclinometer	0.1° resolution
Environmental protection	IP class 66 and 67
Operating temperature	-10–50 °C
Storage temperature	-20–50 °C
Relative humidity	10–95%
OLED display	128x64 pixels
Housing material	Anodized aluminium + PC/ABS + TPE
Dimensions	WxHxD: 76x76.7x39.3 mm [3.0x3.0x1.5"]
Weight	245 q [8.6 oz]
Display unit XT11	245 y [6.0 02]
Type of display/size	SVGA 8" colour screen, backlit LED, multitouch
Battery type	Heavy duty Li lon chargeable
Operating time	Up to16 h continuously
Connections	USB A, USB B, Charger, AV
Communication	Wireless technology, WiFi
•••••	37,
Camera, with diode lamp	13 Mp
IR camera (optional)	FLIR LEPTON® (0–450 °C, 32–842 °F)
Languages	EN/DE/SE/ES/PT/RU/JP/KO/CHN
Help functions	Built-in manual
Environmental protection	IP class 66 and 67
Operating temperature	-10–50 °C
Storage temperature	-20–50 °C
Relative humidity	10–95%
OLED display	96x96 pixels
Housing material	PC/ABS + TPE
Dimensions	WxHxD: 274x190x44 mm [10.8x7.5x1.7"]
Weight	1450 g [51.1 oz]
Cable	
Charging cable (splitter cable)	Length 1 m [39.4"]
Brackets etc.	
Shaft brackets	Type: V-bracket for chain, width 18 mm [0.7"].
	Shaft diameters: 20-150 mm [0.8-6.0"]
	Material: anodised aluminium
Rods	Length: 120 mm, 60 mm [4.72", 2.36"] (extendable)
	Material: Stainless steel



### **IP66 AND IP67 APPROVED**

Easy-Laser® XT is waterproof, dustproof and shockproof. The units have been tested and approved to an Ingress Protection rating of IP66 and IP67, which means that they are dustproof and waterproof to a depth of 1 metre, and also protected against powerful water jets.

















**CHOOSE YOUR SYSTEM!** 



### System Easy-Laser® XT440 Shaft, Part No. 12-0966, includes:

- 1 Measuring unit XT40-M
- 1 Measuring unit XT40-S
- 2 Shaft brackets with chains and rods
- Rods 60 mm [2.36"]
- 1 Measuring tape 3 m [9.8']
- 1 Hexagon wrench set
- 1 Charger (100-240 V AC)
- 1 DC split cable for charging
- 1 DC to USB adapter, for charging
- 1 Quick reference manual
- 1 Cleaning cloth for optics
- 1 USB memory with manuals
- 1 Carrying case Small

Weight: 3.8 kg [8.4 lbs]

Dimension WxHxD: 335x280x130 mm [13.2"x11.0"x5.1"]

### Easy-Laser® XT Alignment App











XT440 with display unit

### System Easy-Laser® XT440 Shaft with Display unit XT11, Part No. 12-0967 includes:

- 1 Display unit XT11
- 1 Measuring unit XT40-M
- 1 Measuring unit XT40-S
- 2 Shaft brackets with chains and rods
- 4 Rods 60 mm [2.36"] 1 Measuring tape 3 m [9.8']
- 1 Hexagon wrench set
- 1 Charger (100-240 V AC)
- 1 DC split cable for charging
- 1 DC to USB adapter, for charging
- 1 Shoulder strap for display unit
- 1 Quick reference manual
- 1 Cleaning cloth for optics
- 1 USB memory with manuals
- 1 Documentation folder
- Carrying case Medium
  Weight: 7.2 kg [15.9 lbs]

Dimension WxHxD: 460x350x175 mm [18.1"x13.8"x6.9"]

### Customize your XT11 (Note that these options cannot be retrofitted):

Part No. 12-0968 IR Camera added to XT11

Part No. 12-0985 Camera (and LED light) removed from XT11





IR Camera added

Camera removed

Easy-Laser® is manufactured by Easy-Laser AB, Alfagatan 6, SE-431 49 Mölndal, Sweden
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QOQBGM111, IC: 5123A-BGM111 and FCC ID: PPD-QCA6234, IC: 4104A-QCA6234. Documentation ID: 05-0830 Rev4





ISO 9001 CERTIFIED 3 YEAR WARRANTY



Can high-performance equipment for shaft alignment really come at a low cost?

Yes it can.



**EXCLUSIVE PACKAGE DISCOUNTS** on the sophisticated Leonova Diamond<sup>®</sup> Aligner system.







## **EFFICIENT AND USER FRIENDLY SHAFT ALIGNMENT**

With this special offer on the new Leonova Diamond<sup>®</sup> Aligner system, there has never been a better time to upgrade to a high-performance alignment solution. Leonova Diamond Aligner is a system for quick and reliable shaft alignment, suitable for most combinations of machinery and coupled or uncoupled shafts. A spin-off of the successful and patented Leonova Diamond instrument, this system is designed for tough environments.

The dual laser system package comes with large, high-precision digital CMOS linear image sensors, providing maximum accuracy. The sensors communicate with Leonova Diamond Aligner via Bluetooth, enabling hassle-free shaft alignment.

## Aligner Package

- Leonova Diamond Aligner handheld instrument with
  - Charger
  - Communication cable
  - Service software for reporting
- LineLazer Alignment kit, including:
  - Alignment sensors
  - Charger for sensors
  - Bluetooth dongle
  - Shaft bracket and chains
  - Tape measure
  - Necessary tools
  - Carrying case, hard





The LineLazer kit for Leonova Diamond Aligner is complete with instrument, alignment sensors, brackets, chains, rods, cables, and tape measure, all in an IP67 carrying case.





## To whom it may concern

## Certificate of representation

We declare that SPM Instrument Bulgaria EOOD is our sole representative in the territory of Bulgaria, Romania and Macedonia.

SPM Instrument Bulgaria EOOD has the technical knowledge and staff to support our full range of equipment hardware and software to your honor company, including sales, service and after sales support. The local specialists are authorized and certified to perform installation and setup, warranty and after warranty service, functional test and calibration of SPM systems, including offline and online condition monitoring.

The specialists have passed advanced technical training in SPM academy located in the main office of SPM in Strängnäs, Sweden. They are also therefor certified to perform theoretical and practical trainings locally on all our products.

By all this and the experience they have, they can make expert condition monitoring evaluation on all kind of rotating machinery with vibration and shock pulse technology for all kind of machine parts, like motor, pump, gearbox and bearing evaluation.

The company is locally represented by the managing director, Mr. Dobromir Dobrev.

Sweden, Strängnäs, 2019-04-25 SPM Instrument AB.

Заличено на основание чл. 2 от ЗЗЛД

Stefan Furness Global Area Sales Manager