

2024

# CONDOTROL

REFERENCE MEASURE



[www.condtrol.com](http://www.condtrol.com)



# 20<sup>th</sup> CONDROL anniversary

CONDROL was established in 2003, its main activity was development of non-destructive testing instruments and construction lasers. OEM/ODM production was a core business, while key partners were private labels from Austria, the USA, Germany, Belgium, Australia and France. Over the course of time, the company created a whole range of innovative products and presented them under its own CONDROL brand.

Products developed in CONDROL's R&D center represent original technical solutions and designs. They always come with added value and have no analogues on the market!

CONDROL contract manufacturing is located at leading EMS factories all over Asia.



**21**   
COUNTRIES where the products are sold

**40+**   
OEM PROJECTS Germany, Belgium, Italy, Austria, Netherlands, USA, Australia

**45**   
PATENTS Europe, US and China

**60**   
EXPERTS

**100+**   
PROJECTS

**4000+**   
RETAIL OUTLETS

**1500 000+**   
HAPPY CUSTOMERS

## COMPANY MISSION

FOR MORE THAN 20 YEARS CONDROL HAS BEEN DEVELOPING MEASURING INSTRUMENT THAT SET THE TRENDS FOR THE INDUSTRY.

**OUR CUSTOMERS** turn demanding and responsible work into exciting hobby.

**OUR PARTNERS** know us as a reliable supplier focused on long-term cooperation. We provide projected profit and stable business development.

## CORPORATE VALUES



**PURSUIT OF EXCELLENCE.** Every year we invest in new products development and laser measuring technology research. By this time, CONDROL has more than 45 patents for unique engineering solutions. Unlike the competition, our "Novelty rate" is the highest in laser measuring instrument market.



**RESPONSIBILITY.** We carry out multi-level tests of all products, as well as quality control at each stage of production. All CONDROL devices go through the required certification process.



**RELIABILITY.** We are assured of our products reliability and provide 3-year warranty for all professional devices.



**CLIENT CENTRICITY.** As a great support for our partners, we are developing CONDROL learning platforms for sales personnel. Moreover, we are enlarging a network of service centers for more convenience of our customers.



**OPENNESS.** We are open to dialogue. At all times we remain honest with our customers, partners and employees. If you have a question, complaint or suggestion, please contact us by [feedback@condtrol.com](mailto:feedback@condtrol.com) and we will help you!

## WARRANTY AND SERVICE

Accuracy and reliability are top priorities for CONDROL. To prove the quality of our instruments, we provide our customers with 24-month warranty for all equipment.

**2** WARRANTY YEAR

For tools that belong to the professional range we offer an opportunity to extend the warranty period by an additional year. Just sign up on our website in a few clicks! Register your tool within 4 weeks of the date of purchase and get an extended warranty. This warranty doesn't cover batteries and accessories.

**2+1\*** WARRANTY YEAR

In case of a warranty claim, your instrument will be fixed at CONDROL service centre for free. Our engineers will repair it in the shortest period of time or replace it with a new one. Moreover, we provide our customers with excellent post-warranty service support.



<b>APPS CONDROL</b>	5
<b>APPLICATION AREA</b>	6-7
<b>LASER DISTANCE METERS</b>	8-22
<b>LINE LASERS</b>	23-40
<b>ROTARY LASERS</b>	41-51
<b>SURVEYING EQUIPMENT</b>	52-54
Digital theodolites	52
Optical levels	53
Measuring wheels	54
<b>NDT EQUIPMENT</b>	55-71
Infrared thermometers	56-59
Thermal imagers	60-64
Wall scanner	65
Coating thickness gauge	66
Concrete strength testers	67-68
Moisture meters	69-71
<b>ACCESSORIES</b>	72-77
Tripods	72-73
Pillars	74
Receivers	75
Other accessories	76-77
<b>FREQUENTLY ASKED QUESTIONS</b>	78-81
Laser distance meters	78
Line lasers	79-80
NDT equipment	80-81
<b>MARKETING SUPPORT</b>	82-83

### Smart Measure

Smart Measure is a convenient app for easy on-site work – just connect laser distance meter to your smartphone. You can take a picture and make photo sketch, draw plans, make calculations and share your data via messengers or by email.



### XLiner Remote

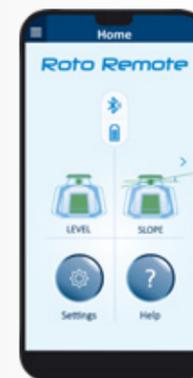
XLiner Remote enables you to control line lasers via Bluetooth from your smartphone. Using the app, you can operate your instrument remotely: switch on laser planes combinations, activate pulse mode, adjust laser brightness and monitor the battery level.



### Roto Remote

Roto Remote allows to operate CONDROL Bluetooth-enabled rotary lasers via a smartphone or a tablet. Unlike the IR remote, the installed Roto Remote app and the Bluetooth module make it possible to control the line laser remotely at a distance of up to 100 m. Graphical interface of the app allows you to get feedback when working with the device.

These are the only rotary levels on the market that have such a useful and practical innovation that significantly expands the functionality.



### Itronix CONDROL

This app turns your smartphone into a digital inclinometer. The app processes camera image and measures the inclination of horizontal and vertical planes. There are several units of measurements (m/ft/in). Also measurements can be converted into percents or degrees.



# APPLICATION AREA



	REAL ESTATE AGENT	ARCHITECT	SURVEYOR	ELECTRICIAN	BUILDER	PLASTERER, PAINTER	CARPENTER, ROOFER
MEASUREMENT OF SIZES AND AREAS.	•						
MEASUREMENT OF ROOM DIMENSIONS AND COMPARISON OF THE RESULTS TO A PLAN.		•					
LAYOUT MEASUREMENT.			•				
CABLE AND VENTILATION CHANNELS, SOCKET AND SERVICE PANELS INSTALLATION.				•			
CLADDING, PLASTERING, INSULATION OF EXTERNAL SURFACES. LEVELING OF SURFACE AND LAYING FOUNDATIONS. GENERAL CONSTRUCTION WORKS. STONEMASONRY.					•		
PAINTING WORK, WALLPAPERING, PLASTERING.						•	
WOODEN PANELS, CUTTING OF BARS, BUTT JOINT. HALF-TIMBERED FRAME WALL.							•

LASER DISTANCE METER 8-22		•	•	•	•	•	•
LINE LASER 23-40			•		•	•	•
ROTARY LASER 41-51			•		•	•	•
SURVEYING EQUIPMENT 52-54		•	•		•		
MEASURING WHEEL 54			•	•			
INFRARED THERMOMETER 56-59					•	•	
THERMAL IMAGER 60-64					•	•	
WALL SCANNER 65		•			•		
COATING THICKNESS GAUGE 66					•	•	
CONCRETE STRENGTH TESTER 67-68					•		
MOISTURE METER 69-71					•	•	•

	DRYWALL INSTALLER	PLUMBER	STAIRCASE INSTALLER	TILER	STONEMASON	FACADE WORKER	INTERIOR DESIGNER	PANEL HOUSE ASSEMBLER	CARPENTER	KITCHEN CABINET MANUFACTURER	LANDSCAPE DESIGNER	GLAZIER
INSTALLATION OF GYPSUMS AND DROPPED CEILINGS.	•											
INSTALLATION OF AIR CONDITIONING ON THE DROPPED CEILING. INSTALLATION OF DUCTWORK, HEATING RADIATORS, WATER PIPES.		•										
TILT LEVELING. FLOORING AND EDGING OF STAIR LEDGES. STAIR INSTALLATION.			•									
TILE CALCULATION. TILE FLOORING. WALL COVERING WITH TILES.				•								
WINDOWS, GATES. REINFORCED CONCRETE FLOORS. REINFORCED CONCRETE STRUCTURES, METAL PROFILES. CLADDING.					•							
FACADE WORKS.						•						
INTERIOR FINISHING.							•					
CONSTRUCTION OF PANEL HOUSES, TRACING, MEASUREMENT AND CONTROL.								•				
WINDOW FRAMES, WOODEN SPANS. LAMINATE, PARQUET. RACKS, LADDERS, GUIDES.									•			
SHELVES, CABINETS, SURFACES, LEVELING.										•		
LANDSCAPE ARCHITECTURE. DRAINAGE, SANITATION INSTALLATION OF FENCES, POLES, CURBS AND OTHER CONSTRUCTIONS. EXCAVATION, PAVAGE.											•	
GLASS PARTITIONS, WINDOWS, OPENINGS.												•

Smart Measure is a free app that gives more opportunities to use Bluetooth-enabled CONDROL laser distance meters.

An overview of the main advantages of the CONDROL Smart Measure app:

- Store unlimited number of measurements in smartphone memory, group and name them;
- Mark dimensions of objects, premises, decor and furniture right in the photos and leave comments. This feature will be highly appreciated by architects, designers and decorators;
- Draw plans of premises with a dimensional grid;
- Save and export files. It simplifies work of builders, designers and furniture manufacturers.

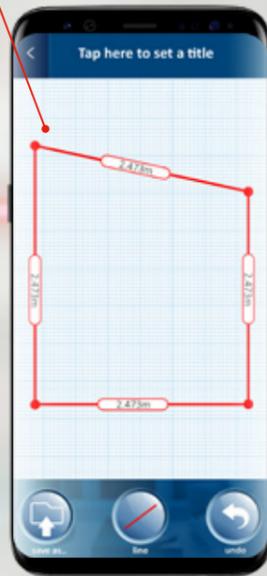
A distinctive feature of CONDROL Smart Measure is its computing functions. Thanks to this app, laser distance meter functionality gets expanded and it becomes possible to calculate wall surface and make indirect measurements.

Download the app from App Store and Google Play.

FOUR OPERATING MODES: PLAN DRAWING, PHOTO SKETCHES, INDIRECT MEASUREMENTS AND CALCULATIONS THAT ARE STORED IN YOUR SMARTPHONE.



DRAW PLANS AND ADD MEASUREMENTS.



INDIRECT MEASUREMENTS: AREA, VOLUME, WALL SURFACE AND PYTHAGORAS.



MAKE PHOTO SKETCHES – IT IS A GREAT FEATURE FOR TAKING MEASUREMENTS OF AN EMPTY ROOM AS WELL AS FOR THE INTERIOR DECORATING.





# LASER DISTANCE METERS

# SPECIFICATIONS



## TECHNICAL CHARACTERISTICS

	Traccer 30	SMART 40	SMART 60	Vector 60	Vector 80
ACCURACY	±3 mm	±1,5 mm	±1,5 mm	±1,5 mm	±1,5 mm
MEMORY				•	•
CALCULATION OF AREA AND VOLUME	•	•	•	•	•
IP54 RATE	•	•	•	•	•
TRACKING	•	•	•	•	•
ADDITION, SUBTRACTION			•	•	•
END-PIECE				•	•
WALL SURFACE					•
TIMER					
MIN/MAX		•	•	•	•
ANGLE MEASURING RANGE					•
DIMENSIONS OF TILTED OBJECTS					
HEIGHT MEASUREMENT					
ROOF PITCH AND LENGTH MEASUREMENT					
PYTHAGORAS FUNCTION	•	•	•	•	•
POINT-TO-POINT					•
STAKE OUT					
CALCULATION OF DIMENSIONS AND AREA OF AN OBJECT FROM A PHOTO					
DIGITAL VIAL					
CAMERA					
TOUCH SCREEN DISPLAY					
BLUETOOTH				•	•
BATTERY	Li-Ion	2xAAA	2xAAA	Li-Ion	Li-Ion

	Vector 100	XP4	XP3 GREEN	XP5	Vector 150	Vector 200
ACCURACY	±1,5 mm	±1,5 mm	±1,5 mm	±1,5 mm	±1,0 mm	±1,0 mm
MEMORY	•	•	•	•	•	•
CALCULATION OF AREA AND VOLUME	•	•	•	•	•	•
IP54 RATE	•	•	•	•	•	•
TRACKING	•	•	•	•	•	•
ADDITION, SUBTRACTION	•	•	•	•	•	•
END-PIECE	•	•	•	•	•	•
WALL SURFACE	•	•	•	•	•	•
TIMER	•	•	•	•	•	•
MIN/MAX	•	•	•	•	•	•
ANGLE MEASURING RANGE	•	•	•	•	•	•
DIMENSIONS OF TILTED OBJECTS					•	•
HEIGHT MEASUREMENT				•	•	•
ROOF PITCH AND LENGTH MEASUREMENT					•	•
PYTHAGORAS FUNCTION	•	•	•	•	•	•
POINT-TO-POINT	•	•	•	•	•	•
STAKE OUT		•	•	•	•	•
CALCULATION OF DIMENSIONS AND AREA OF AN OBJECT FROM A PHOTO					•	•
DIGITAL VIAL	•	•	•	•	•	•
CAMERA		•	•	•	•	•
TOUCH SCREEN DISPLAY					•	•
BLUETOOTH	•	•	•	•	•	•
BATTERY	Li-Ion	Ni-MH	Ni-MH	Ni-MH	Li-Ion	Li-Ion



30 m    40 m    60 m    60 m    80 m

Traccer 30    SMART 40    SMART 60    Vector 60    Vector 80

100 m    100 m    120 m    150 m    150 m    200 m

Vector 100    XP4    XP3 GREEN    XP5    Vector 150    Vector 200

**OUTDOOR MEASUREMENTS**

NO

YES



**DIGITAL INCLINOMETER**

NO

YES



**BLUETOOTH**

YES



COMPACT OPTICS

ROBUST DESIGN  
1M DROP TEST PASSED

AREA/VOLUME/PYTHAGORAS

2-LINE LCD WITH  
A BACKLIGHT

ULTRA-COMPACT SIZE

OUTSTANDING PROTECTION

TYPE-C



2 YEAR WARRANTY



TECHNICAL CHARACTERISTICS	
Working range	0,03...30 m
Accuracy	±3 mm
Distance, area and volume	•
Tracking	•
Pythagoras function	•
Laser type	Class II, 650 nm <1 mW
Power supply	3,7V 200 mAh Li-Ion rechargeable battery
Dimensions	75x35x18 mm
Weight	35 g

DELIVERY PACKAGE	
Item nr.	Traccer 30 1-001-003
Laser Traccer 30	•
USB Type-C cable	•
Pouch	•



LASER DISTANCE METERS

LASER DISTANCE METERS



**2 YEAR WARRANTY**

40m 1.5mm

TECHNICAL CHARACTERISTICS	
Working range	0,05...40 m
Accuracy	±1,5 mm
Distance, area and volume	•
Min/Max Tracking	•
Pythagoras function	•
Laser type	Class II, 635 nm <1 mW
Power supply	2x1,5 V AAA LR03
Dust and water protection	IP54
Dimensions	105x47x27 mm
Weight	83 g

DELIVERY PACKAGE	SMART 40
Item nr.	1-4-097
Laser SMART 40	•
Batteries	•
Pouch	•
Hand strap	•



**2 YEAR WARRANTY**

60m 1.5mm +/-

TECHNICAL CHARACTERISTICS	
Working range	0,05...60 m
Accuracy	±1,5 mm
Distance, area and volume	•
Min/Max Tracking	•
Addition/subtraction	•
Pythagoras function	•
Laser type	Class II, 650 nm <1 mW
Power supply	2x1,5 V AAA LR03
Dust and water protection	IP54
Dimensions	105x47x27 mm
Weight	83 g

DELIVERY PACKAGE	SMART 60
Item nr.	1-4-098
Laser SMART 60	•
Batteries	•
Pouch	•
Hand strap	•





# XP3 GREEN



# XP4 / XP5



LASER DISTANCE METERS

LASER DISTANCE METERS



88% **4x** BRIGHTER  
2+1\* WARRANTY YEAR

- 120m
- 1.5mm
- Camera
- Angle
- Pythagoras
- Point-to-point
- Timer
- Internal memory
- 1/4"
- Smart Measure App

2+1\* WARRANTY YEAR

- 150m
- 1.5mm
- Camera
- Angle
- Pythagoras
- Point-to-point
- Timer
- Internal memory
- 1/4"
- Smart Measure App

TECHNICAL CHARACTERISTICS	XP3 GREEN
Working range	0,05...120 m
Accuracy	±1,5 mm
Distance, area and volume	•
Min/Max Tracking	•
Addition/subtraction	•
Point-to-Point	•
Pythagoras function	•
End-piece	•
Stake out	•
Wall surface	•
Angle measuring range	•
Timer	•
Bluetooth	•
Memory	•
Laser type	Class II, 520 nm <1 mW
Power supply	3x1,2 V 800 mAh Ni-MH rechargeable battery
Dust and water protection	IP54
Dimensions	136x59x28 mm
Weight	170 g



DELIVERY PACKAGE	XP3 GREEN
Item nr.	1-4-084
Laser	•
Batteries	•
USB Type-C cable	•
Pouch	•
Hand strap	•

TECHNICAL CHARACTERISTICS	XP4	XP5
Working range	0,05...150 m	0,05...150 m
Accuracy	±1,5 mm	±1,5 mm
Distance, area and volume	•	•
Min/Max Tracking	•	•
Addition/subtraction	•	•
Point-to-Point	•	•
Pythagoras function	•	•
End-piece	•	•
Stake out	•	•
Wall surface	•	•
Triangle area / Trapezium area	•	•
Circle area	•	•
Cylinder volume	•	•
Angle measuring range	•	•
Timer	•	•
Digital vial	•	•
Bluetooth	•	•
Camera	•	•
Memory	•	•
Laser type	Class II, 635 nm <1 mW	•
Power supply	3x1,2 V 800 mAh Ni-MH rechargeable battery	•
Dust and water protection	IP54	•
Dimensions	136x59x28 mm	•
Weight	170 g	•



DELIVERY PACKAGE	XP4	XP5	XP4	XP5
Item nr.	1-4-073	1-4-123		
Laser	•	•		
Batteries	•	•		
USB Type-C cable	•	•		
Pouch	•	•		
Hand strap	•	•		

# Vector 150

## INNOVATION

# Vector 200

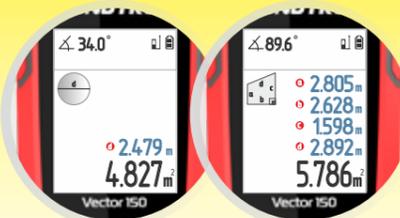
## INNOVATION

LASER DISTANCE METERS

LASER DISTANCE METERS

ROTATING COLOUR DISPLAY

CIRCLE AREA  
TRAPEZOID AREA



WALL SURFACE

CALCULATION OF ROOF PITCH AND LENGTH



MORE OPTIONS WITH SMART MEASURE APP

ADVANCED OPTICS  
DIGITAL VIEWFINDER WITH 8X ZOOM



CALCULATION OF DIMENSIONS AND AREA OF AN OBJECT FROM A PHOTO

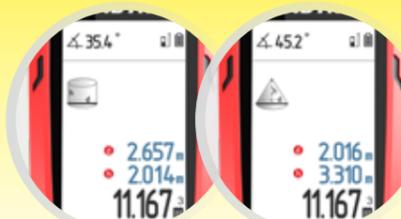


AUTOMATIC END-PIECE DETERMINATION



TOUCH SCREEN DISPLAY

CYLINDER VOLUME  
CONE VOLUME

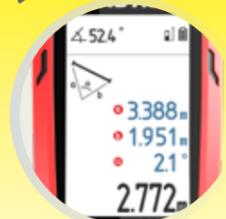


DIMENSIONS OF TILTED OBJECTS  
HEIGHT MEASUREMENT



MORE OPTIONS WITH SMART MEASURE APP

POINT-TO-POINT



CALCULATION OF DIMENSIONS AND AREA OF AN OBJECT FROM A PHOTO



COMPASS

PHOTO GALLERY

CALCULATOR

2+1\* WARRANTY YEAR



2+1\* WARRANTY YEAR



TECHNICAL CHARACTERISTICS	Vector 150
Working range	0,05...150 m
Accuracy	±1,0 mm
Inclinometer	Roof pitch and length, horizontal and vertical distance
3D sensor	Point-to-Point
Object dimensions by taking photo	-
Measuring modes	single, continuous, max/min
Area	Square, triangle, circle, trapezium
Volume	Cube, cylinder, cone
Extra functions	Wall surface, Pythagoras function, stake out
Automatic End-piece recognition	-
Memory	100 values
Bluetooth	BLE 5.0
Camera	1,3 MP
Display	240*320 IPS
Laser type	Class II, 635 nm <1 mW *
Power supply	3,7 V 2500 mAh Li-Ion rechargeable battery
Dust and water protection	IP54
Dimensions / Weight	162x64x32 mm / 220 g



DELIVERY PACKAGE	Vector 150
Item nr.	1-4-121
Laser	-
USB Type-C cable	-
Pouch	-
Hand strap	-

TECHNICAL CHARACTERISTICS	Vector 200
Working range	0,05...150 m
Accuracy	±1,0 mm
Inclinometer	Roof pitch and length, horizontal and vertical distance
3D sensor	Point-to-Point
Object dimensions by taking photo	-
Measuring modes	single, continuous, max/min
Area	Square, triangle, circle, trapezium
Volume	Cube, cylinder, cone
Extra functions	Wall surface, Pythagoras function, stake out
Automatic End-piece recognition	-
Memory	16 Gb SD card
Compass	-
Bluetooth	BLE 5.0
Camera	1,3 MP
Display	480*800 IPS + touch screen
Laser type	Class II, 635 nm <1 mW *
Power supply	3,7 V 2500 mAh Li-Ion rechargeable battery
Dust and water protection	IP54
Dimensions / Weight	162x64x32 mm / 220 g



DELIVERY PACKAGE	Vector 200
Item nr.	1-4-122
Laser	-
USB Type-C cable	-
Pouch	-
Hand strap	-



2+1\* WARRANTY YEAR

Vector 600



Vector 1500



TECHNICAL CHARACTERISTICS	Vector 600	Vector 1500
Working range	5...600 m	5...1500 m
Accuracy	±1 m	
Angle measuring range		•
"Fog" mode	•	•
Calculation of vertical distance		•
Speed measurement range	0 - 300 km/h	
Speed measurement accuracy	±5 km/h	
Angle measurement accuracy		± 60°
Magnification	6x	
Eyepiece caliber	16 mm	
Exit pupil caliber	3,8 mm	
Laser type	Class I, 905 nm <1 mW *	
Power supply	2x1,5V AAA	
Dust and water protection	IP54	
Dimensions	105x82x43 mm	
Weight	172 g	

DELIVERY PACKAGE	Vector 600	Vector 1500
Item nr.	1-4-101	1-4-102
Laser	•	•
Batteries	•	•
Pouch	•	•
Hand strap	•	•





XLiner Remote is a free app that allows to operate Bluetooth-enabled CONDROL line lasers via smartphone or tablet.

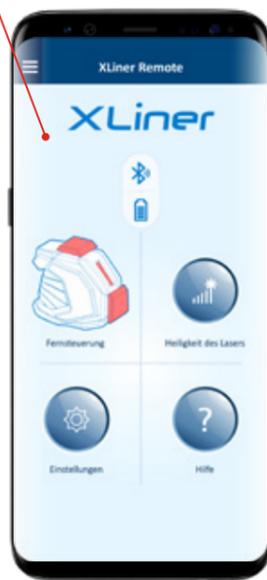
XLiner Remote app allows you to do the following:

- select operation mode (switching on/off) of laser emitters, adjust the combination of required planes;
- activate pulse mode for working with receiver;
- adjust laser power to save the battery;
- monitor the battery level.

Remote control of a line laser is an absolute innovation that only CONDROL instruments possess.

Download the app from App Store and Google Play.

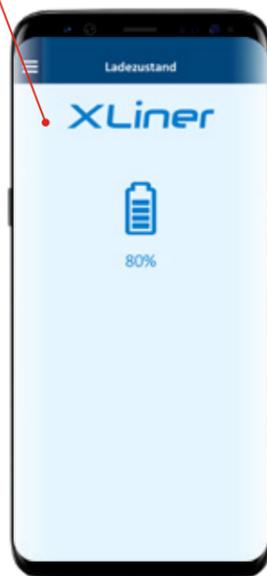
USER-FRIENDLY INTERFACE



SWITCHING ON/OFF OF THE LASER EMITTERS  
PULSE MODE ACTIVATION



BATTERY LEVEL CONTROL



ADJUSTMENT OF THE LASER BRIGHTNESS





## 360° PLANE

## 360° PLANE

NO

YES



## LASER PLUMB

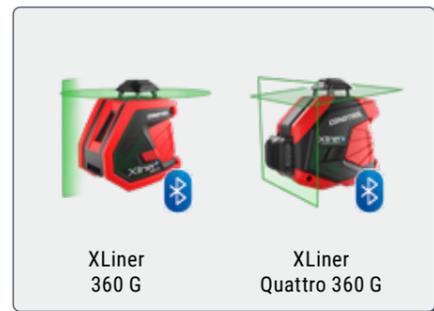
## LASER PLUMB

NO

YES

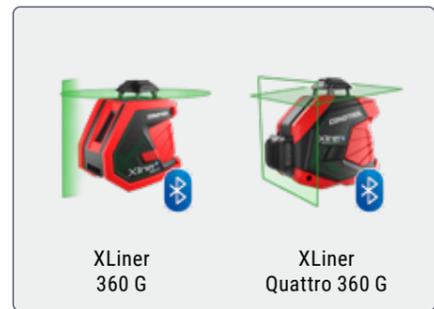
NO

YES



## BLUETOOTH

YES



## BLUETOOTH

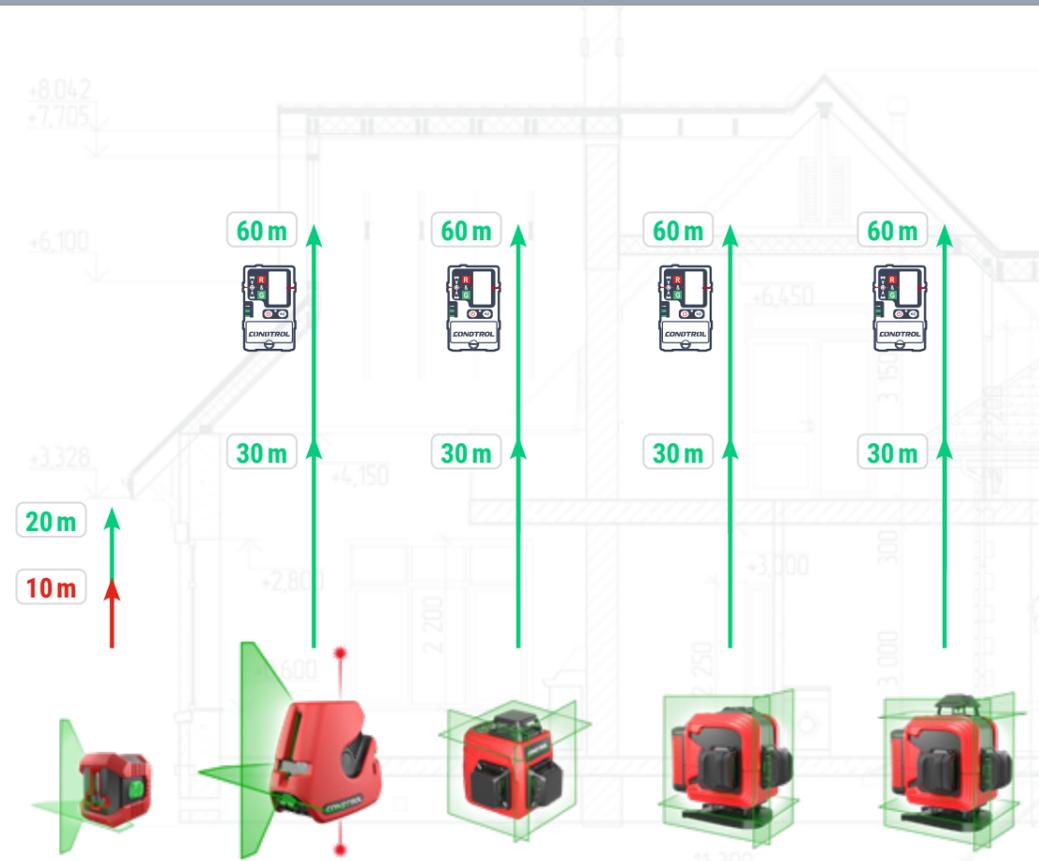
YES





# SPECIFICATIONS

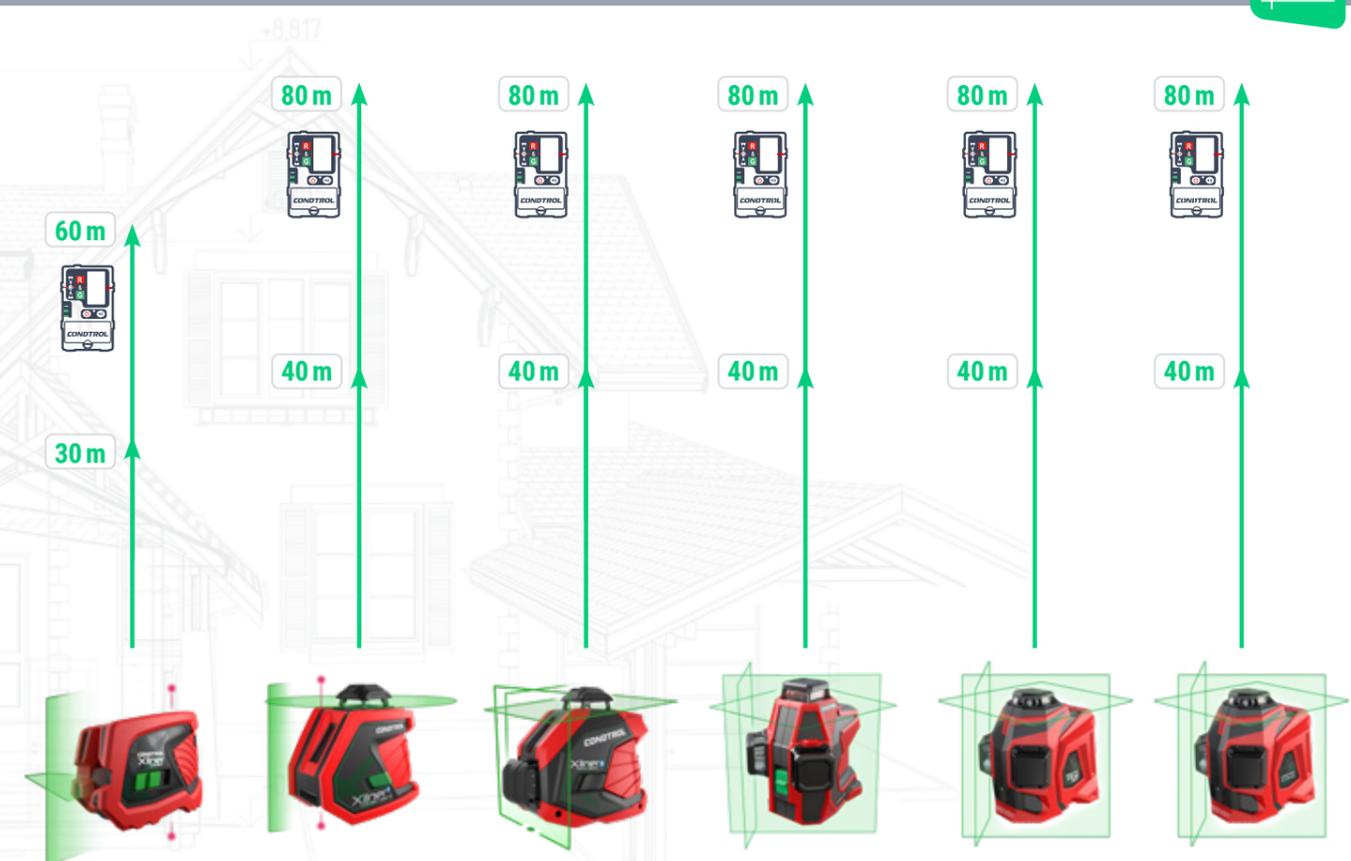
## LINE LASERS



### TECHNICAL CHARACTERISTICS

	Qb Qb Green	NEO G200 NEO G220	SMART 3D	Boden 3D	Fliesen 4D
ACCURACY	± 0,5 mm/m	± 0,3 mm/m	± 0,3 mm/m	± 0,3 mm/m	± 0,3 mm/m
SELF-LEVELLING	±5°	±4,5°	±4°	±3°	±3°
CONTINUOUS OPERATING TIME	8 h	4,5 h	>8 h	>8 h	>8 h
DUST AND WATER PROTECTION	IP54	IP54	IP54	IP54	IP54
TRIPOD THREAD	1/4"	5/8"	1/4"	1/4" and 5/8"	1/4" and 5/8"
LASER PLUMB					
TILT SENSOR					
BLUETOOTH					
Li-Ion BATTERY					
LASER SOURCE	2x635 nm 2x520 nm	2x520 nm 2x520 nm 1x635 nm	3x520 nm	3x515 nm	4x515 nm
PROJECTION OF INCLINED LASER PLANE					
NUMBER OF LASER BEAMS	1H 1V	1H 1V	1H 2V	1H 2V	2H 2V
360° PLANE			3x360°	3x360°	4x360°

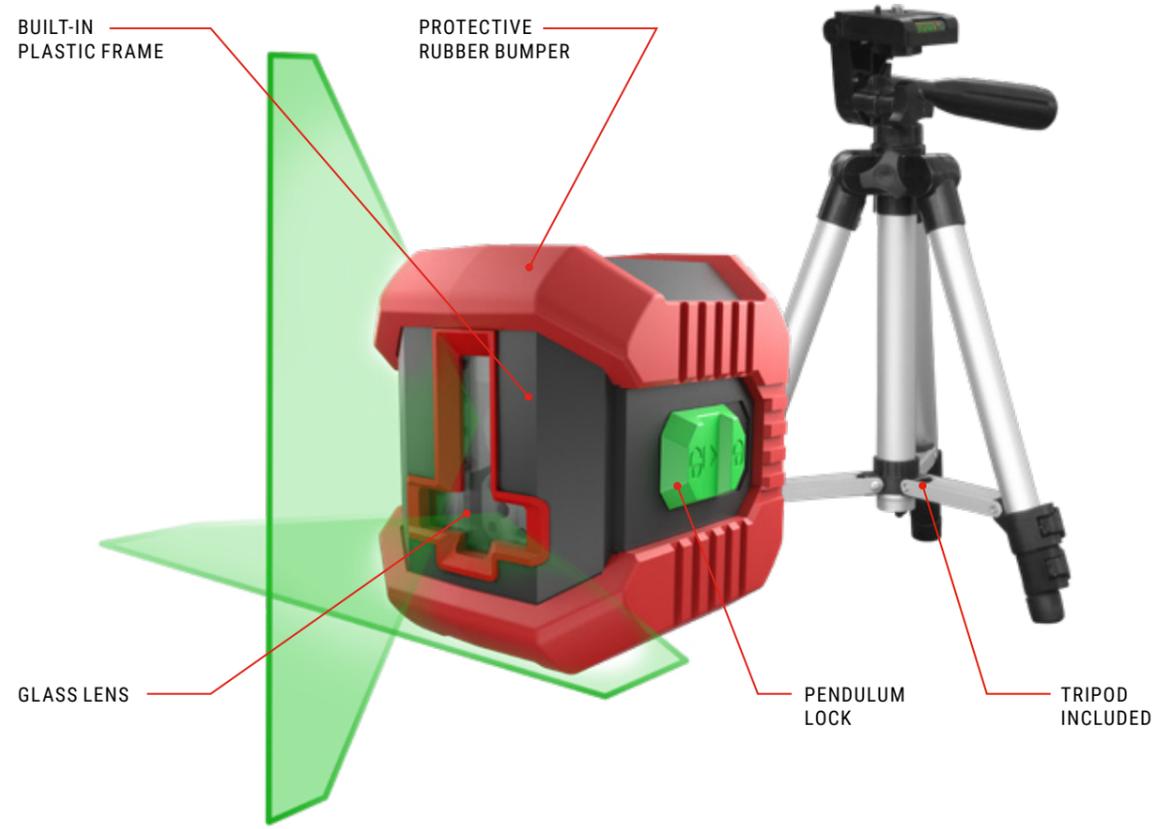
# SPECIFICATIONS



	XLiner Duo XLiner Combo	XLiner 360 G XLiner Combo 360 G	XLiner Quattro 360 G XLiner Pento 360 G	Omniliner 3D	XLiner 3D	TruSlope
ACCURACY	± 0,3 mm/m	±0,2 mm/m	±0,2 mm/m	±0,2 mm/m	±0,2 mm/m	±0,2 mm/m
SELF-LEVELLING	±4°	±3,5°	±3,5°	±4°	±4°	±4°
CONTINUOUS OPERATING TIME	4 h	>8 h	>8 h	>5 h	>8 h	>8 h
DUST AND WATER PROTECTION	IP54	IP54	IP54	IP65	IP65	IP65
TRIPOD THREAD	1/4"	1/4" and 5/8"	1/4" and 5/8"	1/4" and 5/8"	5/8"	5/8"
LASER PLUMB						
TILT SENSOR						
BLUETOOTH						
Li-Ion BATTERY						
LASER SOURCE	2x520 nm 2x520 nm 1x635 nm	2x520 nm 2x520 nm	2x515 nm 2x520 nm 3x515 nm	3x520 nm	3x520 nm	3x520 nm
PROJECTION OF INCLINED LASER PLANE						
NUMBER OF LASER BEAMS	1H 1V	1H 1V	1H 1V 1H 2V	1H 2V	1H 2V	1H 2V
360° PLANE		1x360°	2x360°	3x360°	3x360°	3x360°

LINE LASERS

LINE LASERS



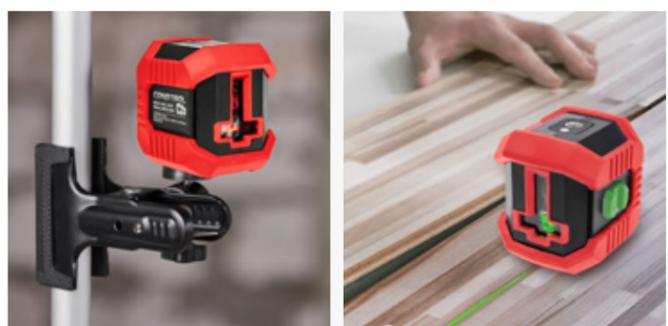
88% BRIGHTER 22% BRIGHTER

4x BRIGHTER

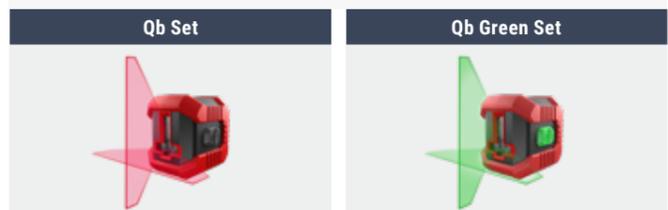
2 YEAR WARRANTY

20m 0.5mm/m 5.0° IP54 1/4"

TECHNICAL CHARACTERISTICS	Qb Set	Qb Green Set
Working range	10 m	20 m
Accuracy	±0,5 mm/m	
Self-levelling	± 5°	
Dust and water protection	IP 54	
Tripod thread	1/4"	
Laser type	Class II, < 1 mW	
	635 nm	520 nm
Power supply	2x1,5 V AAA LR6	
Dimensions	65x57x67 mm	
Weight	175 g	



DELIVERY PACKAGE	Qb Set	Qb Green Set
Item nr.	1-2-121	1-2-438
Laser	•	•
Batteries	•	•
Tripod	•	•



88% BRIGHTER 22% BRIGHTER

4x BRIGHTER

2 YEAR WARRANTY

30m 60m 0.3mm/m 4.5° 5/8"

TECHNICAL CHARACTERISTICS	NEO G200	NEO G220 Set	NEO G220 Kit
Working range / with receiver	30 m	60 m	
Accuracy	±0,3 mm/m		
Self-levelling	± 4,5°		
Dust and water protection	IP54		
Tripod thread	5/8"		
Laser type	Class II, 520 nm < 1 mW		
Power supply	3x1,5 V AA LR6		
Dimensions	120x75x105 mm		
Weight	500 g		

DELIVERY PACKAGE	NEO G200	NEO G220 Set	NEO G220 Kit
Item nr.	1-2-126	1-2-137	1-2-401
Laser	•	•	•
Batteries	•	•	•
Tripod 5/8"		•	•
Magnetic holder	•	•	•
Adapter 5/8" - 1/4"	•	•	•
Cable tie	•	•	•
Magnetic target			•
WallMount Pro			•
Laser glasses			•
Pouch	•		
Plastic case		•	•





# Boden 3D

LINE LASERS



88% BRIGHTER  
22% BRIGHTER  
4x BRIGHTER  
2+1\* WARRANTY YEAR

30m 60m 0.3mm/m 3.0° 1/4" 5/8" Li-Ion

### TECHNICAL CHARACTERISTICS

Working range / with receiver	30 m/60 m
Accuracy	±0,3 mm/m
Self-levelling	± 3°
Dust and water protection	IP54
Tripod thread	1/4", 5/8"
Laser type	Class II, 515 nm < 1 mW
Power supply	3,7 V 4000 mAh Li-Ion rechargeable battery
Dimensions	147x91x136 mm
Weight	728 g

DELIVERY PACKAGE	Boden 3D
Item nr.	1-002-001
Laser Boden 3D	•
Li-Ion battery 2 pcs.	•
Charger	•
Lifting platform	•
Pouch	•



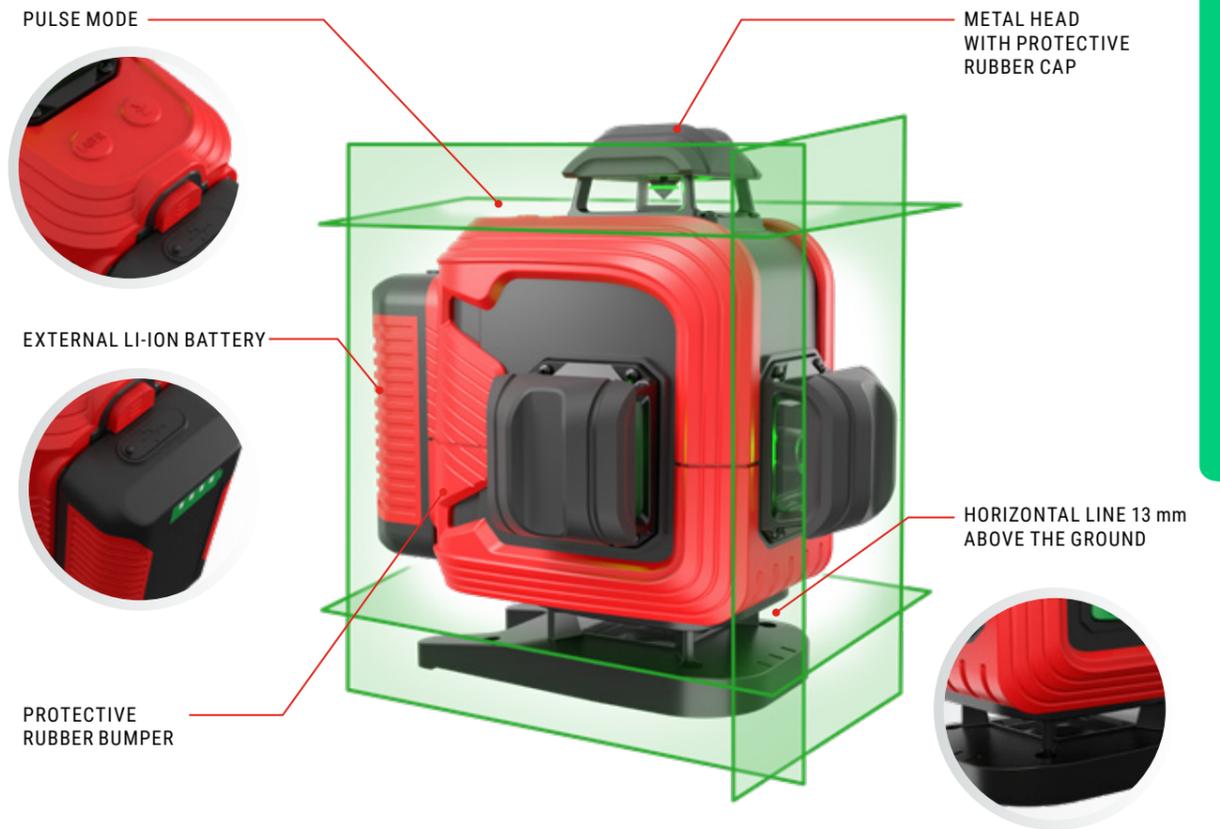
ADJUSTABLE HEIGHT 30-90 mm



# Fliesen 4D



LINE LASERS



88% BRIGHTER  
22% BRIGHTER  
4x BRIGHTER  
2+1\* WARRANTY YEAR

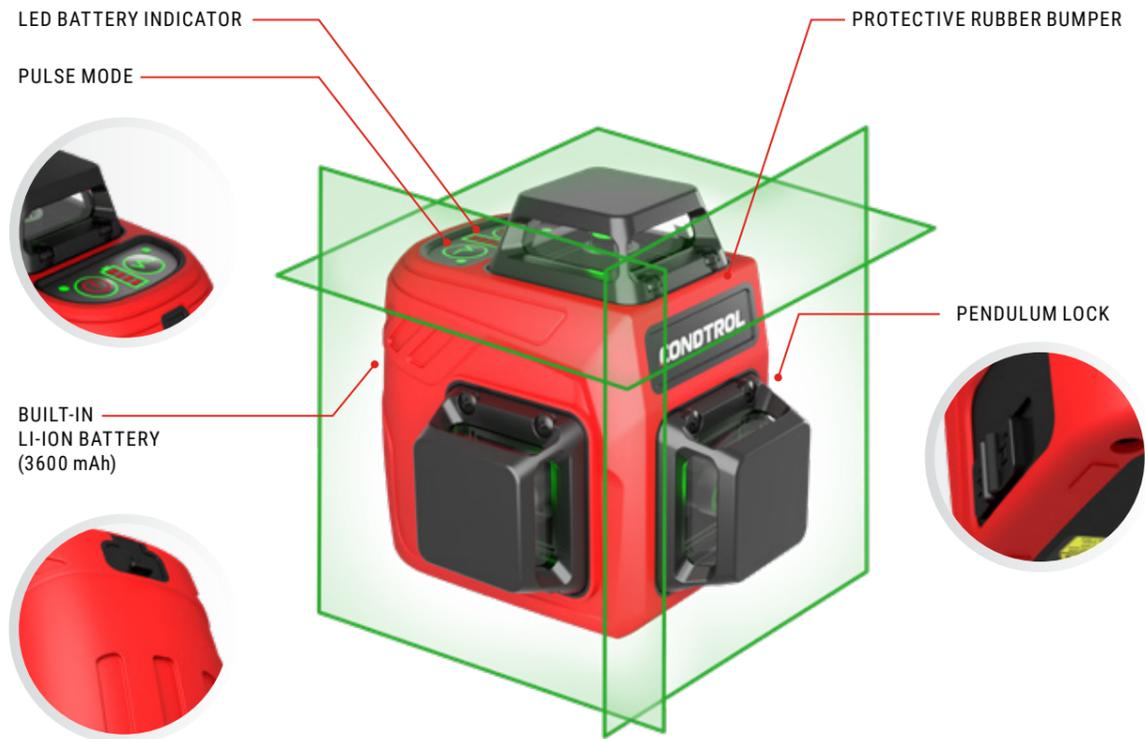
30m 60m 0.3mm/m 3.0° 1/4" 5/8" Li-Ion

### TECHNICAL CHARACTERISTICS

Working range / with receiver	30 m/60 m
Accuracy	±0,3 mm/m
Self-levelling	± 3°
Dust and water protection	IP54
Tripod thread	1/4", 5/8"
Laser type	Class II, 515 nm < 1 mW
Power supply	3,7 V 4000 mAh Li-Ion rechargeable battery
Dimensions	147x91x147 mm
Weight	878 g

DELIVERY PACKAGE	Fliesen 4D
Item nr.	1-002-002
Laser Fliesen 4D	•
Li-Ion battery 2 pcs.	•
Charger	•
Lifting platform	•
WallMount Pro	•
Clamp	•
Magnetic target	•
Plastic case	•





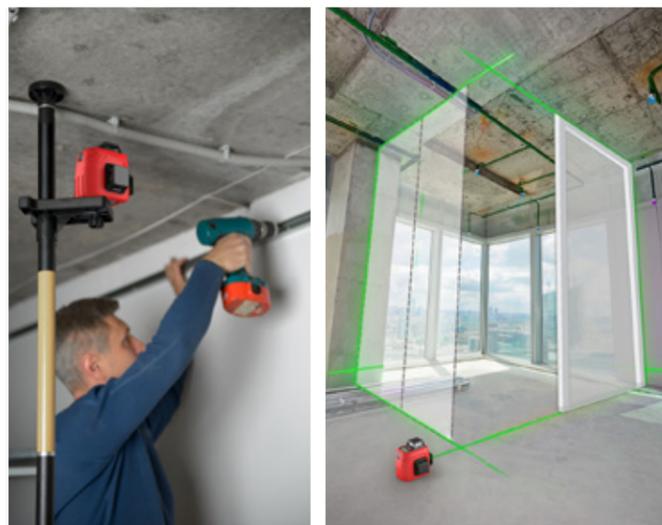
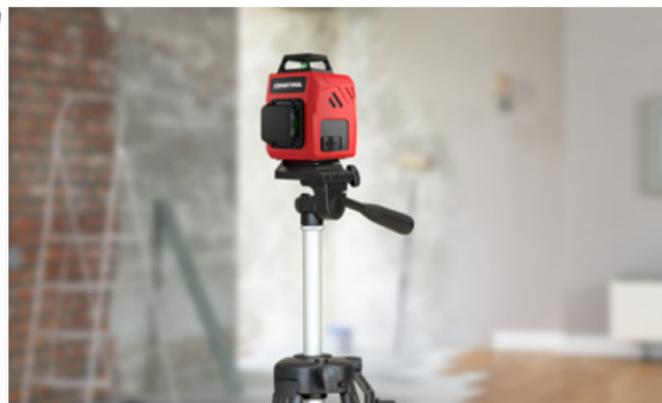
88%  
22%  
4x  
BRIGHTER

2+1\* WARRANTY YEAR

30m | 60m | 0.3mm/m | 4.0° | 1/4" | Li-Ion

### TECHNICAL CHARACTERISTICS

Working range / with receiver	30 m / 60 m
Accuracy	±0,3 mm/m
Self-levelling	± 4°
Dust and water protection	IP54
Tripod thread	1/4"
Laser type	Class II, 520 nm < 1 mW
Power supply	3,7 V 3600 mAh Li-Ion rechargeable battery
Dimensions	105x77x98 mm
Weight	390 g



DELIVERY PACKAGE	SMART 3D
Item nr.	1-002-003
Laser SMART 3D	•
Li-Ion battery	•
Charger	•
Mount	•
Pouch	•



88%  
22%  
4x  
BRIGHTER

2 WARRANTY YEAR

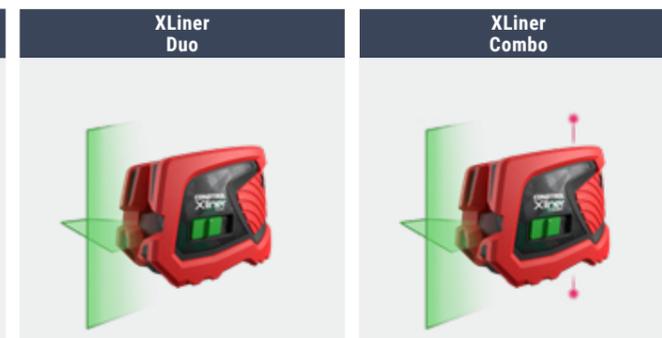
30m | 60m | 0.3mm/m | 4.0° | 1/4"

### TECHNICAL CHARACTERISTICS

Working range / with receiver	30 m / 60 m
Accuracy	±0,3 mm/m
Self-levelling	± 4°
Dust and water protection	IP54
Tripod thread	1/4"
Laser type	Class II, 520 nm < 1 mW
Power supply	4x1,5 V AA
Dimensions	132x84x101 mm
Weight	430 g



DELIVERY PACKAGE	XLiner Duo	XLiner Combo	XLiner Combo Set
Item nr.	1-2-421	1-2-422	1-2-425
Laser	•	•	•
Mount	•	•	•
Tripod 1/4"	•	•	•
Glasses	•	•	•
Batteries	•	•	•
Pouch	•	•	•
Plastic case	•	•	•



# XLiner 360 G / Combo 360 G



# XLiner Quattro 360 G / Pento 360 G



LINE LASERS

LINE LASERS



### TECHNICAL CHARACTERISTICS

Working range / with receiver	40 m / 80 m
Accuracy	±0,2 mm/m
Self-levelling	± 3,5°
Dust and water protection	IP54
Tripod thread	1/4", 5/8"
Laser type	Class II, 520 nm < 1 mW
Power supply	4x1,5 V AAA LR6
Dimensions	132x85x116 mm
Weight	440 g

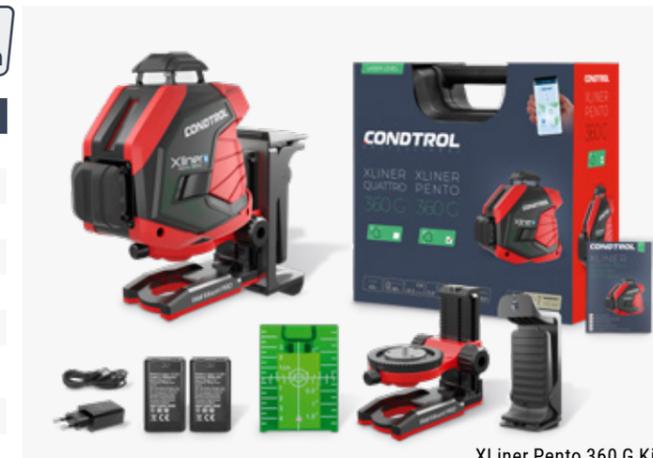
**XLiner Remote App** enables you to control the laser via Bluetooth from your smartphone. Main functions:

- selection of laser planes combinations
- pulse mode
- laser brightness adjustment
- control of the battery level

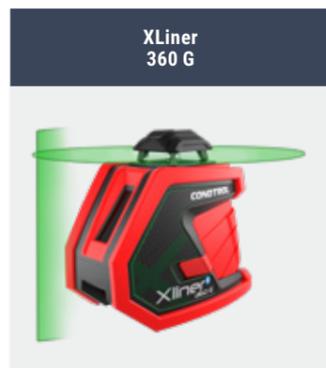


### TECHNICAL CHARACTERISTICS

Working range / with receiver	40 m / 80 m
Accuracy	±0,2 mm/m
Self-levelling	± 3,5°
Dust and water protection	IP54
Tripod thread	1/4", 5/8"
Laser type	Class II, 515 nm < 1 mW
Power supply	7,4 V 2600 mAh Li-Ion rechargeable battery
Dimensions	155x85x132 mm
Weight	730 g



DELIVERY PACKAGE	XLiner 360 G	XLiner 360 G Kit	XLiner Combo 360 G	XLiner Combo 360 G Kit
Item nr.	1-2-134	1-2-408	1-2-411	1-2-412
Laser	•	•	•	•
Batteries	•	•	•	•
WallMount Pro	•	•	•	•
Clamp	•	•	•	•
Magnetic target	•	•	•	•
Pouch	•	•	•	•
Plastic case	•	•	•	•



DELIVERY PACKAGE	XLiner Quattro 360 G	XLiner Quattro 360 G Kit	XLiner Pento 360 G	XLiner Pento 360 G Kit
Item nr.	7-2-105	7-2-106	1-2-158	1-2-410
Laser	•	•	•	•
Li-Ion battery 2 pcs	•	•	•	•
Micro USB-cable	•	•	•	•
Charger	•	•	•	•
WallMount Pro	•	•	•	•
Clamp	•	•	•	•
Magnetic target	•	•	•	•
Pouch	•	•	•	•
Plastic case	•	•	•	•





LINE LASERS

LINE LASERS

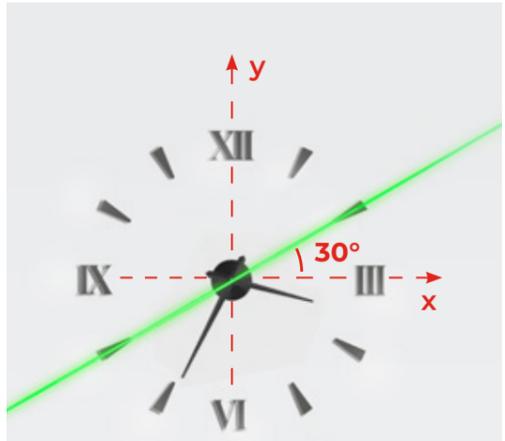
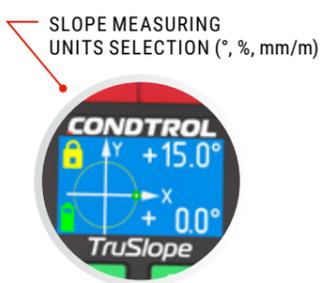


TILT ADAPTER INCLUDED

88% **4x** BRIGHTER  
22%

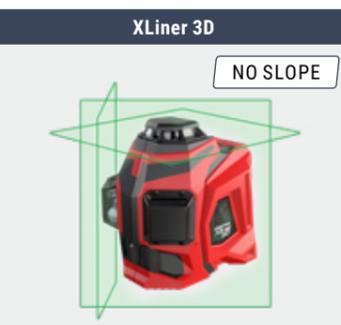
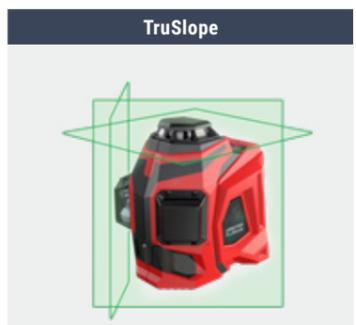
2+1\* WARRANTY YEAR

40m | 80m | 0.2mm/m | 5/8" | Li-Ion



TECHNICAL CHARACTERISTICS	TruSlope	XLiner 3D
Working range / with receiver	40 m / 80 m	40 m / 80 m
Accuracy	±0,2 mm/m	±0,2 mm/m
Self-levelling	± 4°	± 4°
Tilt sensor	YES	NO
Dust and water protection	IP65	IP65
Tripod thread	1/4", 5/8"	1/4", 5/8"
Laser type	Class II, 520 nm < 1 mW *	Class II, 520 nm < 1 mW *
Power supply	3,7 V 5000 mAh Li-Ion rechargeable battery	3,7 V 5000 mAh Li-Ion rechargeable battery
Dimensions	138x98x134 mm	138x98x134 mm
Weight	950 g	950 g

DELIVERY PACKAGE	TruSlope	XLiner 3D
Item nr.	7-2-122	1-2-423
Laser	•	•
Li-Ion battery 2 pcs.	•	•
Charger	•	•
WallMount Pro	•	•
Tilt adapter	•	•
Pouch	•	•
Plastic case	•	•





# Omniliner G3D

PATENT PRO



LINE LASERS



ROTARY LASERS

88% **4x** BRIGHTER  
22%

2+1\* WARRANTY YEAR

40m 80m 0.2mm/m 4.0° 1/4" 5/8" Li-Ion

TECHNICAL CHARACTERISTICS	
Working range / with receiver	40 m/80 m
Accuracy	±0,2 mm/m
Self-levelling	± 4°
Dust and water protection	IP65
Tripod thread	1/4", 5/8"
Laser type	Class II, 520 nm < 1 mW
Power supply	3,7 V 5200 mAh Li-Ion rechargeable battery
Dimensions	140x138x110 mm
Weight	774 g



DELIVERY PACKAGE	Omniliner G3D	Omniliner G3D Kit
Item nr.	1-2-139	1-2-406
Laser Omniliner G3D	•	•
Li-Ion battery	•	•
Micro USB-cable	•	•
Charger	•	•
Universal mount	•	•
Clamp	•	•
Magnetic target	•	•
Bag	•	•
Plastic case	•	•





### TECHNICAL CHARACTERISTICS

ACCURACY	0,15 mm/m	0,1 mm/m	0,1 mm/m
SELF-LEVELLING	±5°	±5°	±5°
CONTINUOUS OPERATING TIME	35 h	35 h	35 h
LASER TYPE	Class II, 630-685 nm < 1 mW	Class II, 630-685 nm < 1 mW	Class II, 515-520 nm < 1 mW
ROTATION SPEED	0, 120, 300, 600 rpm *	0, 120, 300, 600 rpm *	0, 120, 300, 600 rpm *
SCANNING MODE	0°, 10°, 45°, 90°, 180° *	0°, 10°, 45°, 90°, 180° *	0°, 10°, 45°, 90°, 180° *
WORKING RANGE OF REMOTE CONTROL / BLUETOOTH	90 m	90 m	90 m
OPERATION BY THE APP VIA BLUETOOTH	.	.	.
DUST AND WATER PROTECTION	IP55	IP55	IP55
TRIPOD THREAD	5/8"	5/8"	5/8"
POWER SUPPLY	7,4 V 4000 mAh Li-Ion rechargeable battery	7,4 V 4000 mAh Li-Ion rechargeable battery	7,4 V 4000 mAh Li-Ion rechargeable battery
POWER SUPPLY OF THE RECEIVER	1 x 6F22 9 V	1 x 6F22 9 V	1 x 6F22 9 V
DIMENSIONS	150x128x161 mm	150x128x161 mm	150x128x161 mm
WEIGHT	1,5 kg	1,5 kg	1,5 kg

ACCURACY	0,09 mm/m	0,09 mm/m	0,09 mm/m
SELF-LEVELLING	±5°	±5°	±5°
CONTINUOUS OPERATING TIME	20 h	15 h	20 h
LASER TYPE	Class II, 635 nm < 1 mW	Class II, 520 nm < 1 mW	Class II, 635 nm < 1 mW
ROTATION SPEED	0, 60, 120, 300, 600 rpm	0, 60, 120, 300, 600 rpm	0, 60, 120, 300, 600 rpm
SCANNING MODE	0°, 10°, 45°, 90°, 180°	0°, 10°, 45°, 90°, 180°	0°, 10°, 45°, 90°, 180°
WORKING RANGE OF REMOTE CONTROL / BLUETOOTH	90 m	90 m	100 m
OPERATION BY THE APP VIA BLUETOOTH	.	.	.
DUST AND WATER PROTECTION	IP67	IP67	IP67
TRIPOD THREAD	5/8"	5/8"	5/8"
POWER SUPPLY	4 x 1,2 V 4000 mAh Ni-MH rechargeable battery	4 x 1,2 V 4000 mAh Ni-MH rechargeable battery	4 x 1,2 V 4000 mAh Ni-MH rechargeable battery
POWER SUPPLY OF THE RECEIVER	1 x 6F22 9 V	1 x 6F22 9 V	1 x 6F22 9 V
DIMENSIONS	206x206x211 mm	206x206x211 mm	206x206x211 mm
WEIGHT	2,5 kg	2,5 kg	3 kg



Roto Remote is a free app that allows to operate Bluetooth-enabled CONDROL rotary lasers via a smartphone or a tablet.

The Roto Remote app allows you to do the following:

- adjust the rotation speed of the laser emitter - 120, 300, 600 rpm;
- select the scanning sector - 10°, 45°, 90°, 180°;
- set the inclination to the X, Y axis;
- monitor the battery level.

Unlike the IR remote, the installed Roto Remote app and the Bluetooth module make it possible to control the line laser remotely at a distance of up to 100 m. Graphical interface of the app allows you to get feedback when working with the device.

These are the only rotary levels on the market that have such a useful and convenient (practical) innovation that significantly expands the functionality.

Download Roto Remote from App Store and Google Play.



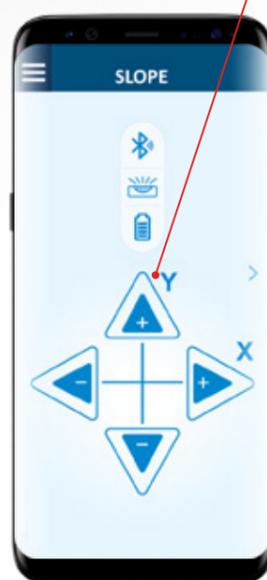
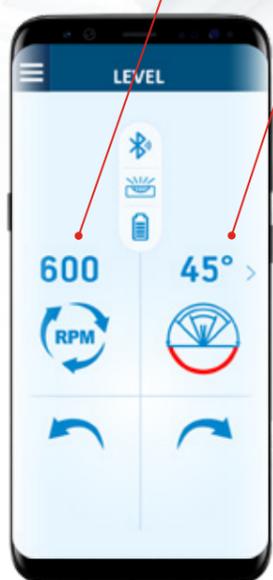
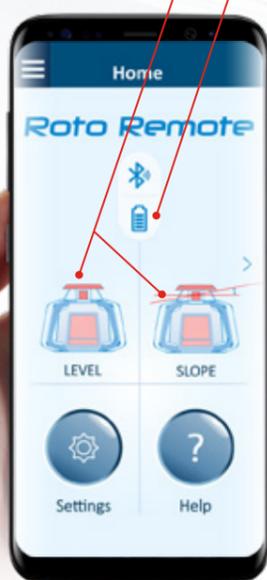
DISPLAY OF THE BATTERY CHARGE LEVEL

ADJUSTMENT OF A SCANNING SECTOR

MANUAL ADJUSTMENT OF THE TILT ANGLE

MODE SELECTION

ROTATION SPEED MEASUREMENT

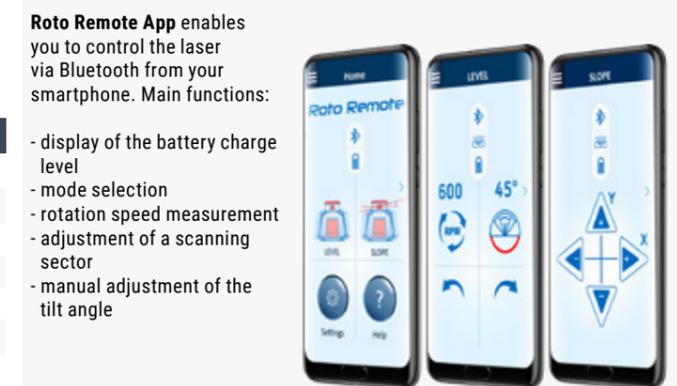


2+1\* WARRANTY YEAR



TECHNICAL CHARACTERISTICS	
Working range with receiver	400 m
Accuracy	0,15 mm/m
Self-levelling	± 5°
Rotation speed	0, 120, 300, 600 rpm
Scanning mode	0°, 10°; 45°; 90°; 180°
Dust and water protection	IP55
Laser type	Class II, 630-685 nm <1 mW
Power supply	7,4 V 4000 mAh Li-Ion rechargeable battery
Dimensions	150x128x161 mm
Weight	1,5 kg

DELIVERY PACKAGE	Easy Roto HVR
Item nr.	7-2-113
Laser Easy Roto HVR	•
Li-Ion battery	•
Laser receiver	•
Charger	•
Universal mount	•
Mount for laser receiver	•
Laser glasses	•
Magnetic target	•
Four handle platform	•
Plastic case	•





ROTARY LASERS



2+1\* WARRANTY YEAR



### TECHNICAL CHARACTERISTICS

Working range with receiver	400 m
Accuracy	0,1 mm/m
Self-levelling	± 5°
Rotation speed	0, 120, 300, 600 rpm
Scanning mode	0°, 10°, 45°, 90°, 180°
Dust and water protection	IP55
Laser type	Class II, 630-685 nm <1 mW
Power supply	7,4 V 4000 mAh Li-Ion rechargeable battery
Dimensions	150x128x161 mm
Weight	1,5 kg

**Roto Remote App** enables you to control the laser via Bluetooth from your smartphone. Main functions:

- display of the battery charge level
- mode selection
- rotation speed measurement
- adjustment of a scanning sector
- manual adjustment of the tilt angle



### DELIVERY PACKAGE

#### Rotech HVR

Item nr.	1-002-100
Laser Rotech HVR	•
Li-Ion battery	•
Laser receiver	•
Charger	•
Universal mount	•
Mount for laser receiver	•
Laser glasses	•
Magnetic target	•
Four handle platform	•
Plastic case	•



88% 4x BRIGHTER  
22%

2+1\* WARRANTY YEAR



### TECHNICAL CHARACTERISTICS

Working range with receiver	400 m
Accuracy	0,1 mm/m
Self-levelling	± 5°
Rotation speed	0, 120, 300, 600 rpm
Scanning mode	0°, 10°, 45°, 90°, 180°
Dust and water protection	IP55
Laser type	Class II, 515-520 nm <1 mW
Power supply	7,4 V 4000 mAh Li-Ion rechargeable battery
Dimensions	150x128x161 mm
Weight	1,5 kg

**Roto Remote App** enables you to control the laser via Bluetooth from your smartphone. Main functions:

- display of the battery charge level
- mode selection
- rotation speed measurement
- adjustment of a scanning sector
- manual adjustment of the tilt angle



### DELIVERY PACKAGE

#### Rotech HVG

Item nr.	1-002-103
Laser Rotech HVG	•
Li-Ion battery	•
Laser receiver	•
Charger	•
Universal mount	•
Mount for laser receiver	•
Laser glasses	•
Magnetic target	•
Four handle platform	•
Plastic case	•

ROTARY LASERS



# Roto HVR



ROTARY LASERS



2+1\* WARRANTY YEAR

600m 0,09mm/m 5.0° IP67 Ni-MH

### TECHNICAL CHARACTERISTICS

Working range with receiver	600 m
Accuracy	0,09 mm/m
Self-levelling	± 5°
Rotation speed	0, 60, 120, 300, 600 rpm
Scanning mode	0°, 10°, 45°, 90°, 180°
Dust and water protection	IP67
Laser type	Class II, 635 nm < 1 mW
Power supply	4 x 1,2 V 4000 mAh Ni-MH rechargeable battery
Dimensions	206x206x211 mm
Weight	2,5 kg

**Roto Remote App** enables you to control the laser via Bluetooth from your smartphone. Main functions:

- display of the battery charge level
- mode selection
- rotation speed measurement
- adjustment of a scanning sector
- manual adjustment of the tilt angle



DELIVERY PACKAGE	Roto HVR	Roto HVR Set
Item nr.	7-2-000	7-2-094
Laser Roto HVR	•	•
Ni-MH batteries	•	•
Laser receiver X-act Roto	•	•
Charger	•	•
Universal mount	•	•
Mount for laser receiver	•	•
Laser glasses	•	•
Magnetic target	•	•
Geodatic tripod Geo	•	•
Leveling pole Flexi Staff	•	•
Plastic case	•	•

# Roto HVG



ROTARY LASERS



88% 22% 4x BRIGHTER

2+1\* WARRANTY YEAR

600m 0,09mm/m 5.0° IP67 Ni-MH

### TECHNICAL CHARACTERISTICS

Working range with receiver	600 m
Accuracy	0,09 mm/m
Self-levelling	± 5°
Rotation speed	0, 60, 120, 300, 600 rpm
Scanning mode	0°, 10°, 45°, 90°, 180°
Dust and water protection	IP67
Laser type	Class II, 520 nm < 1 mW
Power supply	4 x 1,2 V 4000 mAh Ni-MH rechargeable battery
Dimensions	206x206x211 mm
Weight	2,5 kg

DELIVERY PACKAGE	Roto HVG	Roto HVG Set
Item nr.	7-2-001	7-2-095
Laser Roto HVG	•	•
Ni-MH batteries	•	•
Laser receiver X-act Roto	•	•
Charger	•	•
Universal mount	•	•
Mount for laser receiver	•	•
Laser glasses	•	•
Magnetic target	•	•
Geodatic tripod Geo	•	•
Leveling pole Flexi Staff	•	•
Plastic case	•	•





# Digi Roto HVR



ROTARY LASERS

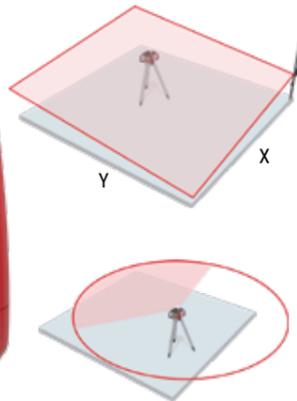
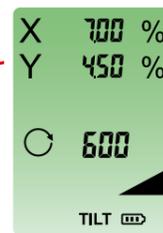
4 HANDLES FOR EASY CARRYING AND PROTECTION

METAL HEAD

LASER PLUMB (ZENITH)

DIGITAL SLOPE IN X AND Y-AXIS

DUST AND WATER PROTECTION IP67



WITH REMOTE CONTROL AND DIGITAL RECEIVER

LASER PLUMB (NADIR)

2+1\* WARRANTY YEAR



### TECHNICAL CHARACTERISTICS

Working range with receiver	600 m
Accuracy	0,09 mm/m
Self-leveling	± 5°
Rotation speed	0, 60, 120, 300, 600 rpm
Scanning mode	0°, 10°, 45°, 90°, 180°
Dust and water protection	IP67
Laser type	Class II, 635 nm < 1 mW
Power supply	4 x 1,2 V 4000 mAh Ni-MH rechargeable battery
Dimensions	206x206x211 mm
Weight	3 kg



### DELIVERY PACKAGE

Item nr.	Digi Roto HVR
Laser Digi Roto HVR	•
Ni-MH batteries	•
Laser receiver X-act Roto	•
Charger	•
Remote control	•
Universal mount	•
Mount for laser receiver	•
Laser glasses	•
Magnetic target	•
Plastic case	•



# MACHINE CONTROL RECEIVER MC-200 Set



ROTARY LASERS

DETECTS RED LASERS

CONVENIENT TO OPERATE

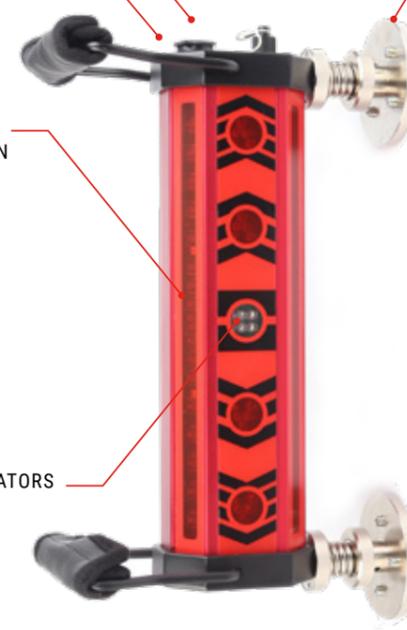
HEAVY DUTY MAGNET CLAMPS FOR BUCKET/BLADE

MOUNTING CLAMP (OPTIONAL)

250 mm DETECTION WINDOW

CABIN RECEIVER WITH LED SIGNAL ARROWS

BRIGHT LED INDICATORS



2+1\* WARRANTY YEAR



### TECHNICAL CHARACTERISTICS

Working range	200 m
Fine accuracy	±2-10 mm
Coarse accuracy	±5-23 mm
Sensor length	25 cm
Dust and water protection	IP66
Power supply	7,2 V 3000 mAh Ni-MH battery
Dimensions	376x180x49 mm
Weight	3,1 kg

### DELIVERY PACKAGE

Item nr.	MC-200 SET
Device MC-200 Set	465-6-01
Cabin receiver	•
Magnetic clamp	•
Charger	•
Connection cable	•
Plastic case	•

### OPTIONAL ACCESSORY

Metal clamps (not included)	465-6-02
-----------------------------	----------



SURVEYING EQUIPMENT

SURVEYING EQUIPMENT



24X/32X ZOOM AND MULTI-COATED OPTICS



360° LIMB



METAL HOUSING

MAGNETIC COMPENSATOR

2+1\* WARRANTY YEAR



TECHNICAL CHARACTERISTICS

TELESCOPE	
Length	155 mm
Objective aperture	45 mm
Magnification	30x
Image	erect
Angular field of view	1° 30'
Minimal viewing distance	1,3 m
Stadia ratio	100
Additive constante	0
ELECTRONIC ANGLE MEASUREMENT	
Method	incremental
LCD	double
Accuracy of angle measurement	10"
Circle diameter	71 mm
BACKLIGHT	
LCD, cross wires	
DATA TRANSFER	
EDM interface	•
Data output	•
LEVEL SENSITIVITY	
Cylindrical level	30"/2 mm
Universal level	8"/2 mm
Power supply	6V1300 mAh Ni-MH rechargeable batterie
Dimensions	160x190x324 mm
Weight	4,8 kg



DELIVERY PACKAGE	iTeo 10
Item nr.	2-2-015
Device iTeo 10	•
Charger	•
Battery box for alkaline-batteries	•
Screwdriver	•
Adjusting pin	•
Brush	•
Cleaning flannel-cloth	•
Plastic case	•

2+1\* WARRANTY YEAR



TECHNICAL CHARACTERISTICS

	24X	32X
Standard deviation per 1 km double-run levelling	2 mm	1,5 mm
Magnification	24x	32x
Objective aperture		38 mm
Minimal viewing distance		0,6 m
Stadia Ratio		100
Type of compensator		magnetic
Compensator operating range		15'
Setting accuracy		0,5"
Dimensions	190x128x123 mm	
Weight	1,22 kg	



DELIVERY PACKAGE	24X
Item nr.	2-3-038
Device 24X	•
Plummet	•
Adjusting pin	•
Case	•

DELIVERY PACKAGE	32X	32X Set
Item nr.	2-3-039	2-3-047
Device 32X	•	•
Geodetic tripod Geo	•	•
Leveling pole TS5	•	•
Plummet	•	•
Adjusting pin	•	•
Case	•	•



# MEASURING WHEEL Wheel Pro/ WheelTronic

**SURVEYING EQUIPMENT**



**2** WARRANTY YEAR

99999.9m 0.3%

### TECHNICAL CHARACTERISTICS

Measuring range	0-99999,9 m
Accuracy	±0,3%
Smallest unit displayed	0,1 m
Wheel diameter	318 mm
Circumference	1 m
Brake	•
Dimensions	1100x320x160 mm/ 580x320x160 mm
Weight	2 kg



### DELIVERY PACKAGE

	Wheel Pro
Item nr.	2-10-006
Device Wheel Pro	•
Pouch	•

**2** WARRANTY YEAR

99999.9m 0.5%

### TECHNICAL CHARACTERISTICS

Measuring range	0-99999,9 m
Accuracy	±0,5%
Smallest unit displayed	0,1 m
Wheel diameter	160 mm
Circumference	0,5 m
Power supply	2x1,5V (AAA)
Display	•
Dimensions	1120x160x90 mm/ 670x160x90 mm
Weight	0,7 kg



### DELIVERY PACKAGE

	WheelTronic
Item nr.	2-10-005
Device WheelTronic	•
Batteries	•
Pouch	•



**NON-DESTRUCTIVE TESTING INSTRUMENTS**



NON-DESTRUCTIVE TESTING INSTRUMENTS

NON-DESTRUCTIVE TESTING INSTRUMENTS



## TECHNICAL CHARACTERISTICS

	Maxwell 2	Maxwell 3	Maxwell 4
ACCURACY	± 2°C (± 2%)	± 2°C (± 1,5%)	± 2°C (± 2%)
MEASURING RANGE OF SURFACE TEMPERATURE	-50 °C ...+350 °C	-30 °C ...+380 °C	-50 °C...+800 °C
DISPLAY	LCD	LCD	LCD
OPTICAL RESOLUTION	12:1	12:1	12:1
POWER SUPPLY	2 x 1,5V (AAA)	2x1,5 V (AAA)	1x9 V 6F22
DIMENSIONS	148x83x35 mm	148x102x46 mm	104x164x47 mm
WEIGHT	120 g	130 g	155 g

LASER DOT



BLUE/RED LED BACKLIGHT AND SOUND SIGNAL FOR TEMPERATURE VALUES BEYOND THE SET LIMIT



€ ADJUSTMENT OF EMISSIVITY

DATA HOLD FUNCTION TO CAPTURE MEASUREMENTS ON THE SCREEN



2+1\* WARRANTY YEAR



## TECHNICAL CHARACTERISTICS

Accuracy	± 2°C (± 2%)
Measuring range of surface temperature	-50 °C ...+350 °C
Display	LCD
Optical resolution	12:1
Power supply	2x1,5V (AAA)
Dimensions	148x83x35 mm
Weight	120 g

## DELIVERY PACKAGE

	Maxwell 2
Item nr.	3-16-045
Device Maxwell 2	•
Batteries	•



NON-DESTRUCTIVE TESTING INSTRUMENTS

LASER SPOT MARKING TO DETERMINE THE SIZE OF THE MEASURED SPOT



DETERMINATION OF MIN/MAX TEMPERATURE WITH A RED DIODE

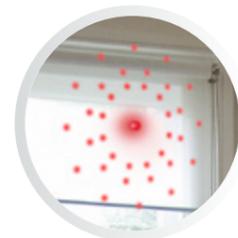


€ ADJUSTMENT OF EMISSIVITY

DATA HOLD FUNCTION TO CAPTURE MEASUREMENTS ON THE SCREEN



LASER SPOT MARKING TO DETERMINE THE SIZE OF THE MEASURED SPOT



RH SENSOR

DETERMINATION OF COLD BRIDGES WITH RED/YELLOW/GREEN DIODE



€ ADJUSTMENT OF EMISSIVITY

DEW POINT MODE



NON-DESTRUCTIVE TESTING INSTRUMENTS

2+1\* WARRANTY YEAR

-30 °C ... +380 °C   2.0 °C   D:S 12:1   € 0.1 - 1.0

TECHNICAL CHARACTERISTICS

Accuracy	± 2 °C (± 1,5%)
Measuring range of surface temperature	-30 °C ...380 °C
Display	LCD
Optical resolution	12:1
Power supply	2x1,5 V (AAA)
Dimensions	148x102x46 mm
Weight	130 g



DELIVERY PACKAGE	Maxwell 3
Item nr.	3-16-043
Device Maxwell 3	•
Batteries	•

2+1\* WARRANTY YEAR

-50 °C ... +800 °C   2.0 °C   D:S 12:1   € 0.1 - 1.0   RH 0 - 100%

TECHNICAL CHARACTERISTICS

Accuracy	± 2 °C (± 2%)
Measuring range of surface temperature	-50 °C...+800 °C
Display	LCD
Measuring range of ambient temperature	-10 °C...+60 °C
Measuring range of relative humidity	0% ...100%
Optical resolution	12:1
Power supply	1x9 V 6F22
Dimensions	104x164x47 mm
Weight	155 g



DELIVERY PACKAGE	Maxwell 4
Item nr.	3-16-044
Device Maxwell 4	•
Batteries	•



## TECHNICAL CHARACTERISTICS

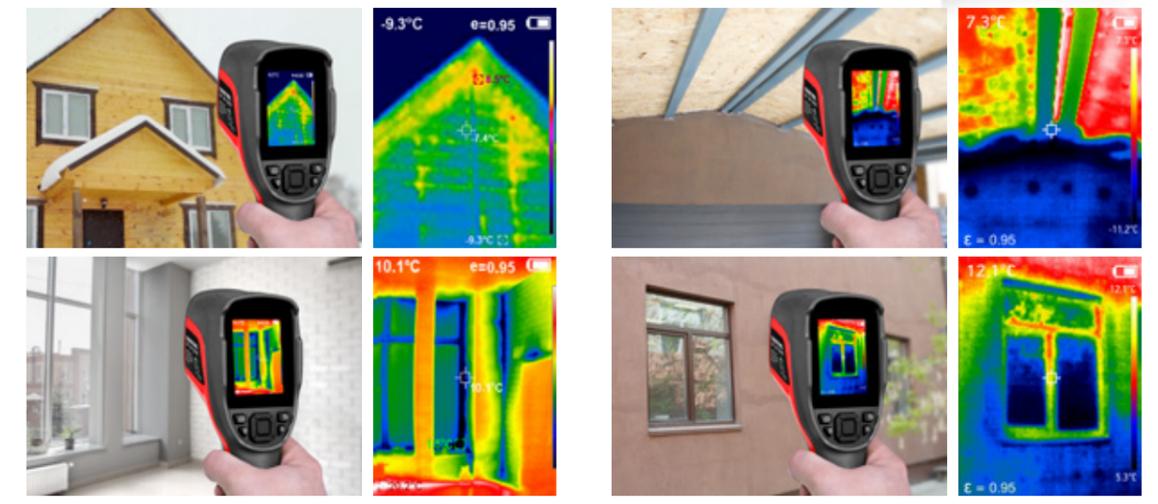
	IR-CAM 1	IR-CAM 2 Pro	IR-CAM 3
ACCURACY	± 2°C (± 2%)	± 2°C (± 2%)	± 2°C (± 2%)
THERMAL SENSITIVITY	0,14 °C	0,07 °C	0,04 °C
VIEWING ANGLE	33°x33°	35,4°x26,8°	56°x42°
RESOLUTION OF INFRARED IMAGE	32x32 (1024) Pixel	220x160 (35200) Pixel	256x192 (49152) Pixel
DIGITAL CAMERA	2 Megapixel	2 Megapixel	2 Megapixel
DISPLAY	2,8 inch. touch sensitive colour LCD	2,8 inch. touch sensitive colour LCD	2,8 inch. colour LCD
OPERATING TEMPERATURE	-10 °C...+50 °C	-10 °C...+50 °C	-10 °C...+50 °C
STORAGE TEMPERATURE	-20 °C...+60 °C	-20 °C...+60 °C	-20 °C...+60 °C
STORAGE HUMIDITY	10%...80%	10%...80%	10%...95%
DIMENSIONS	217x63x50 mm	220x69x70 mm	230x72x95 mm
WEIGHT	230 g	260 g	520 g
POWER SUPPLY	3,7 V 2500 mAh Li-Ion rechargeable battery	3,7 V 3200 mAh Li-Ion rechargeable battery	3,6 V 5000 mAh Li-Ion rechargeable battery
INTERNAL MEMORY	1 GB with ability to save to PC via USB	1 GB with ability to save to PC via USB	
EXTERNAL MEMORY	up to 64 Gb (memory card slot)	up to 64 Gb (memory card slot)	Micro SD card 16 Gb (provided)
USB			

## 49 152 Pixels FOR A VARIETY OF USES

### MONITORING OF THE HEATED FLOOR



### HEAT LEAKAGE DETECTION INSIDE AND OUTSIDE (FACADE, ROOF, WINDOWS)



### MONITORING OF RADIATORS AND AIR-CONDITIONERS



### DETECTION OF WET PLACES AND LEAKS



### ASSESSMENT OF INSULATION CONDITION



### OVERHEAT DETECTION OF ELECTRIC EQUIPMENT



NON-DESTRUCTIVE TESTING INSTRUMENTS

ACTIVE TEMPERATURE CONTROL ON THE DISPLAY VIA TOUCH SCREEN

VIDEO-THERMOGRAPHY

INTERNAL MEMORY

RECHARGEABLE BATTERY

TRIPOD THREAD

MIXING OF INFRARED AND VISIBLE IMAGES

GERMAN SENSOR 

32X32 (1024) Pixel

NETD 140 mK

-30°C...+1000°C



ACTIVE TEMPERATURE CONTROL ON THE DISPLAY VIA TOUCH SCREEN

VIDEO-THERMOGRAPHY

INTERNAL MEMORY

RECHARGEABLE BATTERY

TRIPOD THREAD

MIXING OF INFRARED AND VISIBLE IMAGES

WI-FI MODULE TO BROADCAST SCREEN ON TV

US SENSOR 

220X160 (35200) Pixel

NETD 70 mK

-30°C...+330°C



NON-DESTRUCTIVE TESTING INSTRUMENTS

2+1\* WARRANTY YEAR

-50 °C  +1000 °C

32x32 px 

1 Gb 

REC  IR video



**TECHNICAL CHARACTERISTICS**

Measuring range of surface temperature	-50 °C...+1000 °C
Accuracy	± 2 °C ( ± 2%)
Thermal sensitivity	0,14 °C
Viewing angle	33°x33°
Resolution of infrared image	32x32 (1024) Pixel
Resolution of visible light image	2 Megapixel
Display	2,8 inch. touch sensitive colour LCD
Power supply	3,7 V 2500 mAh Li-Ion rechargeable battery
Dimensions	217x63x50 mm
Weight	230 g

**DELIVERY PACKAGE**

	IR-CAM1
Item nr.	3-17-023
Device IR-CAM1	•
Mini USB cable	•
Plastic case	•



2+1\* WARRANTY YEAR

-10 °C  +330 °C

220x160 px 

1 Gb 

REC  IR video





**TECHNICAL CHARACTERISTICS**

Measuring range of surface temperature	-10 °C...+330 °C
Accuracy	± 2 °C ( ± 2%)
Thermal sensitivity	0,07 °C
Viewing angle	35,4°x26,8°
Resolution of infrared image	220x160 (35200) Pixel
Resolution of visible light image	2 Megapixel
Display	2,8 inch. touch sensitive colour LCD
Power supply	3,7 V 3200 mAh Li-Ion rechargeable battery
Dimensions	220x69x70 mm
Weight	260 g

**DELIVERY PACKAGE**

	IR-CAM2 PRO
Item nr.	3-17-021
Device IR-CAM2 PRO	•
Mini USB cable	•
Plastic case	•



NON-DESTRUCTIVE TESTING INSTRUMENTS



2+1\* WARRANTY YEAR

-20 °C to +550 °C, 256x192 px, 16 Gb, Li-Ion

TECHNICAL CHARACTERISTICS

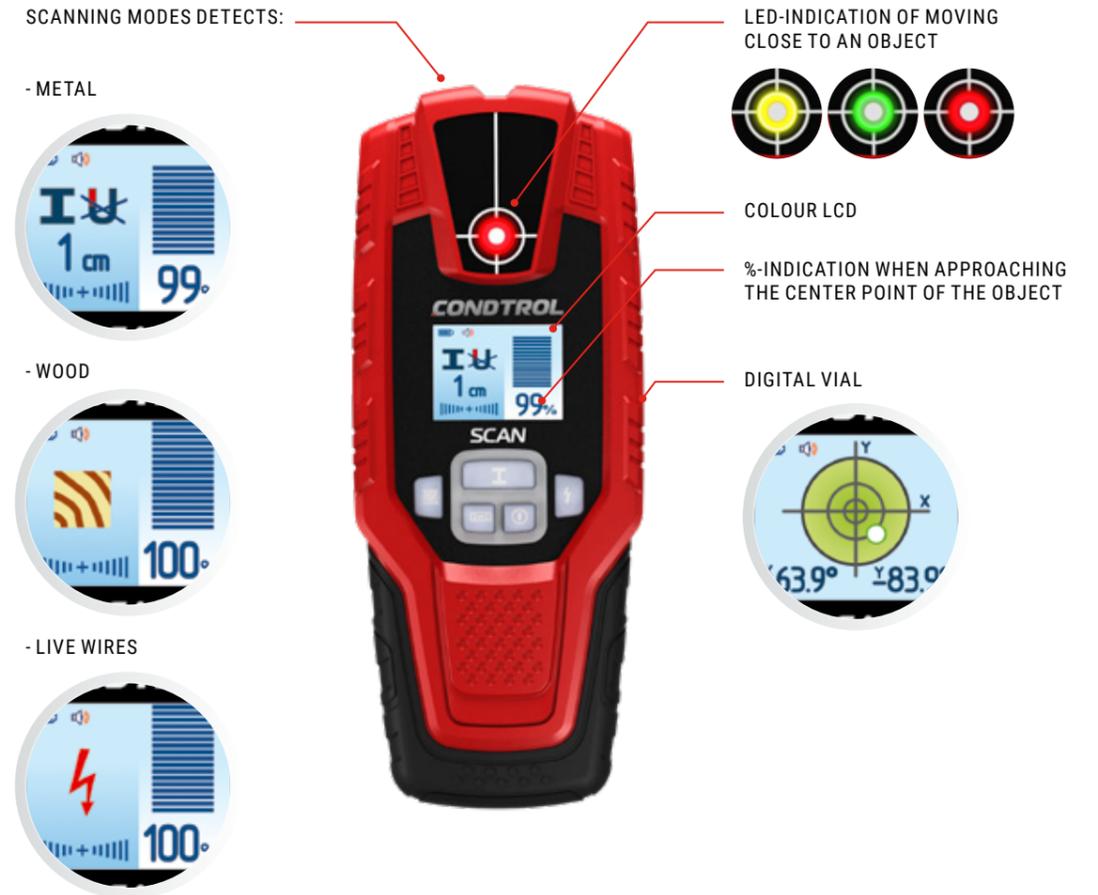
Measuring range of surface temperature	-20 °C...+550 °C
Accuracy	± 2°C ( ± 2%)
Thermal sensitivity	0,04 °C
Viewing angle	56°x42°
Resolution of infrared image	256x192 (49152) Pixel
Resolution of visible light image	2 Megapixel
Display	2,8 inch. colour LCD
Power supply	3,6 V 5000 mAh Li-Ion rechargeable battery
Dimensions	230x72x95 mm
Weight	520 g

DELIVERY PACKAGE IR-CAM3

Item nr.	3-17-022
Device IR-CAM3	•
USB type-C cable	•
Memory SD card 16 GB	•



NON-DESTRUCTIVE TESTING INSTRUMENTS



2+1\* WARRANTY YEAR

100 mm, 50 mm, 20 mm, and target icon

TECHNICAL CHARACTERISTICS

Maximum scanning depth	
Ferrous metals	100 mm
Non-ferrous metals	80 mm
Copper cable (live)	50 mm
Wood	20 mm
Power supply	1x 9 V 6LR61
Continuous operating time	6 h
Storage temperature	-20 °C...+70 °C
Operating temperature	-10 °C...+50 °C
Dimensions	196x76x25 mm
Weight	145 g

DELIVERY PACKAGE SCAN

Item nr.	3-12-027
Device SCAN	•
Batteries	•
Pouch	•

100 mm, 80 mm, 50 mm, 20 mm

Ferrous metals, Non-ferrous metals, Copper cable (live), Wood





NON-DESTRUCTIVE TESTING INSTRUMENTS

NON-DESTRUCTIVE TESTING INSTRUMENTS

**MEASUREMENT STATISTICS**

**FAST CALIBRATION**

**INTERNAL MEMORY**

**AUTOMATIC DETECTION OF METAL TYPE**

**MEASURING OF COATING THICKNESS OF FERROUS AND NON-FERROUS METALS**

**SAMPLES OF COATING THICKNESS FOR CALIBRATION ARE INCLUDED IN THE DELIVERY PACKAGE**

**Fe/NFe**

**COMBINED MEASURING PRINCIPLE**

**2+1\* WARRANTY YEAR**

0-1500µm   3.0%   Fe/NFe

TECHNICAL CHARACTERISTICS	
Measuring range	0-1500 µm
Modes of measurement	single measurement continuous measurement
Accuracy	±3% ; +2 µm
Memory	•
Minimal thickness of the measured surface	>0,5 mm
Display backlight	•
Power supply	2x1,5V (AAA)
Dimensions	112x51x28 mm
Weight	80 g



DELIVERY PACKAGE	Paint PRO
Item nr.	3-7-051
Device Paint PRO	•
Metal plate (Aluminium, iron) 2 pcs.	•
Film reference samples 5 pcs.	•
Batteries	•
Micro-USB cable	•
CD with Software	•
Plastic case	•



**INTEGRATED CONVERSION CURVES**

**OLED**  
- SUNLIGHT READABLE LCD DISPLAY  
- VIEWING ANGLE 160°  
- OPERATING TEMPERATURE -5°...+40°

**INTERNAL MEMORY**

**ERGONOMIC HANDLE**

**BLUETOOTH-INTERFACE**

**METAL FRAME**

**ORIGINAL SOFTWARE**

**2+1\* WARRANTY YEAR**

3.5-99.9 MPa   7.0%   3 materials   OLED   up to 500

TECHNICAL CHARACTERISTICS	
Measuring range	3,5-99,9 MPa
Accuracy	±7%
Impact energy	0,15 J
Power supply	2x1,5 V (AA) LR6
Memory	up to 500 values
Dimensions	205x175x60 mm
Weight	600 g



DELIVERY PACKAGE	BETON PRO
Item nr.	3-10-024
Device Beton Pro	•
Grinding stone	•
Strength reference	•
Batteries	•
Pouch	•
Plastic case	•





NON-DESTRUCTIVE TESTING INSTRUMENTS

NON-DESTRUCTIVE TESTING INSTRUMENTS

CALIBRATION TABLE ON THE BACK OF THE DEVICE



ROBUST HOUSING



LONG LIFE-CYCLE OF THE DEVICE

LIGHT WEIGHT

CONVERSION CHART INCLUDED

10.3	13.7
10.3	11.6
11.0	12.8
11.9	14.0
13.4	15.4
14.8	16.7
16.2	18.2
17.6	19.6
18.1	21.2
20.8	22.7
22.4	24.5
24.1	26.0
25.9	27.9
27.8	29.6
29.5	31.6
31.4	33.5

IMPACT ENERGY NOT LESS THEN 1.8 J

**2+1\*** WARRANTY YEAR

10-60 MPa    20 %

**TECHNICAL CHARACTERISTICS**

Measuring range	10-60 MPa
Accuracy	±20%
Impact energy	1,8 J
Operating temperature	-5°C to +40°C, relative humidity up to 80%, non-condensing
Dimensions	280x75x60 mm
Weight	1,1 kg

**DELIVERY PACKAGE**    **BETON**

Item nr.	3-10-004
Device Beton	•
Grinding stone	•
Screwdriver	•
Spring	•
Plastic case	•



NON-DESTRUCTIVE TESTING METHOD

COMPACT SIZE



ERGONOMIC DESIGN



HIGH ACCURACY

SCANNING DEPTH UP TO 20 mm



8 TIMBER GROUPS AND 6 CONCRETE GROUPS TO SELECT ACCORDING TO THE DENSITY OF AN OBJECT



**2+1\*** WARRANTY YEAR

up to 65.0 %    up to 2.5 %    8 groups + 6 groups

**TECHNICAL CHARACTERISTICS**

Moisture measuring range (max.)	0,1 -65%
Absolute accuracy	up to ± 2,5%
Power supply	2x1,5 V AAA
Dimensions	110x43x25 mm
Weight	75 g

**DELIVERY PACKAGE**    **HYDRO TEC**

Item nr.	3-14-006
Device HYDRO-Tec	•
Batteries	•
Pouch	•



NON-DESTRUCTIVE TESTING INSTRUMENTS

NON-DESTRUCTIVE TESTING METHOD

HIGH ACCURACY

8 TIMBER GROUPS AND 6 CONCRETE GROUPS TO SELECT ACCORDING TO THE DENSITY OF AN OBJECT

CHANGEABLE SCANNING DEPTH 15, 30 mm

REMOTE AIR HUMIDITY AND TEMPERATURE SENSOR (OPTIONAL)

2+1\* WARRANTY YEAR

up to 65.0 % | up to 3.0 % | 8 groups + 6 groups | Micro-USB icon

**TECHNICAL CHARACTERISTICS**

Moisture measuring range	0,1 -65%
Absolute accuracy	up to ± 3%
Internal memory	99 values
Power supply	3x1,5V (AAA) LR03
Dimensions	150x59x28 mm
Weight	170 g

**DELIVERY PACKAGE**

	HYDRO	HYDRO Kit
Item nr.	1-004-001	1-004-006
Device HYDRO	•	•
Batteries	•	•
Micro-USB cable	•	•
Hand strap	•	•
Remote sensor	•	•
Pouch	•	•



NON-DESTRUCTIVE TESTING INSTRUMENTS

NON-DESTRUCTIVE TESTING METHOD

COLOUR LCD

RECHARGEABLE BATTERIES

3 MOISTURE SENSORS FOR MEASURING OBJECTS OF DIFFERENT SHAPE AND THICKNESS

HIGH ACCURACY

8 TIMBER GROUPS AND 6 CONCRETE GROUPS TO SELECT ACCORDING TO THE DENSITY OF AN OBJECT

SCANNING DEPTH UP TO 30 mm

REMOTE AIR HUMIDITY AND TEMPERATURE SENSOR (OPTIONAL)

2+1\* WARRANTY YEAR

up to 65.0 % | up to 3.0 % | 8 groups + 6 groups | Micro-USB icon

**TECHNICAL CHARACTERISTICS**

Moisture measuring range	0,1 -65%
Absolute accuracy	up to ± 3%
Internal memory	50 values
Power supply	3x1,2 V 800 mAh (AAA)
Dimensions	150x59x28 mm
Weight	170 g

**DELIVERY PACKAGE**

	HYDRO PRO	Remote sensor
Item nr.	3-14-013	3-14-023
Device HYDRO PRO	•	•
Batteries	•	•
Micro-USB cable	•	•
Hand strap	•	•
Remote sensor	•	•
Pouch	•	•



**H140**

Compatibility	QB, Smart 3D, Boden 3D, Fliesen 4D, XLiner Duo, XLiner Combo, XLiner 360 G, XLiner Combo 360 G, XLiner Quattro 360 G, XLiner Pento 360 G, Omniliner G3D, TruSlope, XLiner 3D Vector 60, Vector 80, Vector 100, XP3 Green, XP4, XP5, Vector 150, Vector 200
Tripod thread	1/4"
Height	52,5-140 cm
Weight	1,045 kg
Item nr.	2-17-080



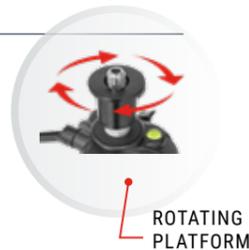
**H160**

Compatibility	QB, Smart 3D, Boden 3D, Fliesen 4D, XLiner Duo, XLiner Combo, XLiner 360 G, XLiner Combo 360 G, XLiner Quattro 360 G, XLiner Pento 360 G, Omniliner G3D, TruSlope, XLiner 3D Vector 60, Vector 80, Vector 100, XP3 Green, XP4, XP5, Vector 150, Vector 200
Tripod thread	1/4"
Height	60-160 cm
Weight	1,165 kg
Item nr.	2-17-081



**H190**

Compatibility	NEO G200, NEO G220, XLiner 360 G, XLiner Combo 360 G, XLiner Quattro 360 G, XLiner Pento 360 G, Omniliner G3D, TruSlope, XLiner 3D Easy Roto HVR
Tripod thread	5/8"
Height	64-190 cm
Weight	1,25 kg
Item nr.	2-17-023



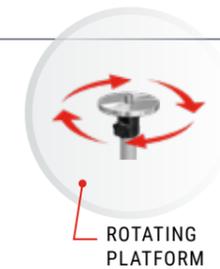
**Geo**

Compatibility	Easy Roto HVR, Rotech HVR, Rotech HVG, Roto HVR, Roto HVG, Digi Roto HVR 24X, 32X, iTeo
Tripod thread	5/8"
Height	101-167 cm
Weight	4 kg
Item nr.	2-17-019



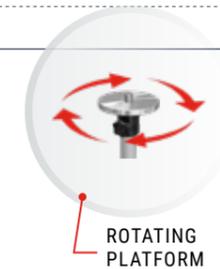
**HD200**

Compatibility	NEO G200, NEO G220, XLiner 360 G, XLiner Combo 360 G, XLiner Quattro 360 G, XLiner Pento 360 G, Omniliner G3D, TruSlope, XLiner 3D Easy Roto HVR, Rotech HVR, Rotech HVG, Roto HVR, Roto HVG, Digi Roto HVR
Tripod thread	5/8"
Height	103-200 cm
Weight	5,2 kg
Item nr.	2-17-556



**HD 360 (Geo XL)**

Compatibility	NEO G200, NEO G220, XLiner 360 G, XLiner Combo 360 G, XLiner Quattro 360 G, XLiner Pento 360 G, Omniliner G3D, TruSlope, XLiner 3D Easy Roto HVR, Rotech HVR, Rotech HVG, Roto HVR, Roto HVG, Digi Roto HVR
Tripod thread	5/8"
Height	128-184 cm
Weight	7,3 kg
Item nr.	2-17-021



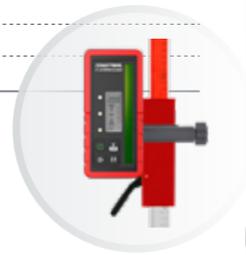
## Pillar

Compatibility	NEO G200, NEO G220, XLiner 360 G, XLiner Combo 360 G, XLiner Quattro 360 G, XLiner Pento 360 G, Omniliner G3D, TruSlope, XLiner 3D
Tripod thread	5/8"
Height	100-366 cm
Weight	2,84 kg
Item nr.	2-17-004



## Flexi Staff

Compatibility	for all line lasers and rotary lasers
Height	max. 240 cm
Weight	0,92 kg
Item nr.	7-1-088



## Digi Staff

Compatibility	for all line lasers and rotary lasers
Height	130-300 cm
Weight	1,652 kg
Power supply	4x1,5V AA
Item nr.	7-1-999



## TS5

Compatibility	for all rotary lasers and levels
Height	125-500 cm
Weight	1,203 kg
Item nr.	2-16-017



## ULR

Compatibility	for all red and green line lasers
Working range	up to 100 m
Accuracy	±1 mm
Power supply	1,5 V AAA LR6
Dimensions	100×62×18 mm
Weight	120 g
Item nr.	2-17-199



## RotoSense

Compatibility	for all rotary lasers
Working range	250 m
Accuracy	±1,5 mm
Power supply	9 V
Dimensions	155×74×31 mm
Weight	250 g
Item nr.	7-2-099



## X-actRoto

Compatibility	for all red rotary lasers
Working range	300 m
Accuracy	±1 mm
Power supply	9 V
Dimensions	165×75×38 mm
Weight	370 g
Item nr.	7-1-033



## X-actRoto Green

Compatibility	for all green rotary lasers
Working range	300 m
Accuracy	±1 mm
Power supply	9 V
Dimensions	165×75×38 mm
Weight	370 g
Item nr.	7-1-034



**Motorised rotating platform**

Compatibility	for precise and smooth rotation of all line lasers
Tripod thread	5/8"
Weight	640 g
Dimensions	120x130x83 mm
Item nr.	1-7-0111



**WallMount**

Compatibility	for all line lasers
Tripod thread	5/8"
Weight	290 g
Dimensions	150x100x150 mm
Item nr.	1-7-011



**WallMount Pro**

Compatibility	for all line lasers
Tripod thread	5/8"
Weight	350 g
Dimensions	125x85x115 mm
Item nr.	7-1-027



**Tilt adapter**

Compatibility	for all line lasers and rotary lasers
Tilt adjustment	0-90°
Thread	5/8"
Item nr.	7-2-107



**Tripod head**

Compatibility	for all line lasers and laser distance meters
Tripod thread	1/4"
Item nr.	7-2-101



**Adapter screw from 1/4" to 5/8"**

Compatibility	for all line lasers
Item nr.	1-7-036



**Adapter screw from 5/8" to 1/4"**

Compatibility	for all line lasers
Item nr.	1-7-103



**Red magnet target / Green magnet target**

Compatibility	for all red line lasers and laser distance meters	for all green line lasers and laser distance meters
Item nr.	1-7-010	1-7-110



**Reflective target for distance meters**

Compatibility	for all laser distance meters
Item nr.	1-7-021



**Red laser glasses / Green laser glasses**

Compatibility	for all red lasers	for all green lasers
Item nr.	1-7-005	1-7-101



**Digital angle ruler A-Tronix 20**

Measuring range	0°-360°
Accuracy	0,3°
Power supply	3V CR2032 Li-Ion
Dimensions	200x35x2 mm
Weight	160 g
Item nr.	1-002-300





## LASER DISTANCE METERS

### What does accuracy $\pm 1.5$ mm mean and what influences it?

Accuracy is the closeness of the measured value to a standard or true value. Under unfavorable conditions, such as bright sunlight or making measurement to surfaces with poor reflectivity, certain difficulties might take place:

- uneven walls – they influence the accuracy and may cause double signal;
- glossy surfaces – they affect the correct reflection of the beam;
- textile, wet or rough surfaces – they absorb the signal.

Accuracy at a distance from 10 m to 30 m may increase by approximately  $\pm 0.025$  mm/m. At distances over 30 meters, the maximum deviation increases to  $\pm 0.15$  mm/m.

### Why is the optics size important?

The power of the laser signal, reflected and received by the optics, is directly proportional to the area of the optics aperture -  $S = \pi r^2$ . Thus, when the radius of the lens increases by 2 times, the signal reception range increases by 4 times. It allows you to work confidently even under unfavorable conditions.

### How to work outside and under adverse conditions?

Measurement accuracy may get worse under unfavorable measurement conditions.

#### Bright light

Red laser is hard to see in the sun. The optimal conditions for making measurements outdoors are twilight or cloudy weather, indoors - dim light. If you have to work outside for a long time, you can either use a CONDROL reflector, or choose a laser distance meter with a green laser or with a built-in camera.

#### Surface

When pointing the laser at corrugated, concrete, mirror or very dark surfaces, the reflected signal is very weak. You can solve the problem with a sheet of paper or a special CONDROL reflector: fix the reflector or a sheet of paper on the object, point the laser at it and make measurements.

#### Dust, fog and high humidity

The laser beam is scattered when refracted by the smallest particles of water and dust in the air, so a CONDROL reflector is used to amplify the signal.

#### Long distance measurements and beam jitter

To prevent the laser beam from shifting, it is better to fix the laser distance meter on a tripod and use the timer function.

### Why do you need a camera in a laser distance meter?

A camera is used for precise targeting. It allows you to "zoom" an object, making it possible to measure outdoors in all weather conditions at a distance of more than 100 meters, even if the laser beam is not visible.

### What are the benefits of working with the Smart measure app?

The Smart Measure app for Bluetooth-enabled CONDROL laser distance meters allows you to:

- store unlimited number of measurements in smartphone memory, group and name them;
- mark dimensions of objects, premises, decor and furniture right in the pictures and leave comments;
- draw plans of premises with a dimensional grid;
- share the data and create photo sketches.

### Why do you need a timer and a tripod mount?

A timer and a tripod are used for precise targeting. They enable you to take aim at the spot and avoid shifting of the laser beam, when you press buttons while measuring at long distances.



## LINE LASERS

### What does accuracy of a line laser mean?

Accuracy or the maximum permissible error is one of the most important characteristics of a line laser. It is measured in mm/m and it determines how many millimeters a laser could be out over a defined range.

### How to check the accuracy by yourself?

#### Checking the horizontal plane:

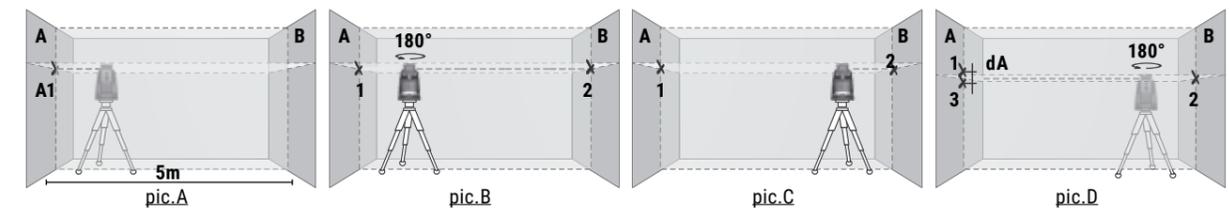
It is carried out by using two walls located opposite each other. Measure the distance between the walls (L value), install the device as close as possible to wall A (see pic. A). Move switch bar to unlocked position, switch on the vertical and horizontal emitters. Turn the device so that the intersection of the laser lines is located on the closest wall. Mark points of intersection of the laser lines with mark A1.

2. Turn the device by  $180^\circ$ , mark the point of intersection of the laser lines on the opposite wall with mark B2. (see pic. B)

3. Install the device closer to the opposite wall B. Place it the way that the intersection point of the laser lines coincides with the previously marked point B2 (see pic. C).

4. Turn the device by  $180^\circ$ . Aim the device at wall A so that the vertical line passes through the previously marked point A1. Mark the intersection point of the laser lines on wall A with mark A3. (see pic.D).

5. Measure the distance d between marks A1 and A3 (see pic. D). The accuracy is the value of  $d/L$ . If the obtained value exceeds the maximum allowed in the manual, contact the CONDROL service centre for calibration.

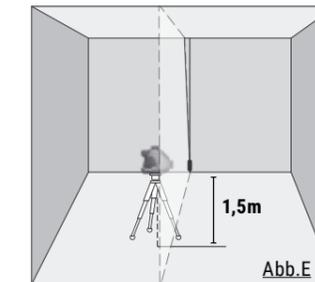


#### Checking the vertical plane:

Use a plumb bob as a reference of a vertical. Place the device against a plumb bob.

1. Move switch bar to unlocked position, switch on the vertical plane and align the vertical laser line with the low point of the plumb bob.

2. If the deviation of the axis of the vertical line from the plumb bob exceeds that stated in the manual, contact the CONDROL service centre for calibration.

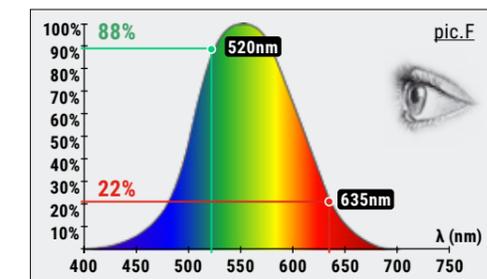


### Why do you need a pulse mode?

If there is a long distance between a line laser and an object, laser beam may become less visible. A laser receiver is used to detect a laser when the pulse mode is switched on. It becomes easier to work at long distances and in unfavorable conditions. How to use the receiver? When the laser beam reaches the photosensitive element, the receiver starts indicating if it should be moved up or down in order to align the laser beam with the zero mark. The device equipped with a pulsed mode has a bigger working range, thus, it is more efficient.

### Why is green laser brighter than the red one?

When perceived by the human eye, green colour is brighter than the red one. Even if lighting conditions and laser power are the same, the brightness of a green laser will be higher.





## LINE LASERS

### Why do you need laser dots?

Laser plumb is used when you install an object in a determined place - for instance when you set up vertical columns, profiles, pipes, or project electrics on the ceiling. All you need is to switch on the corresponding function on your line laser and set it in the desired place. The laser beam will be projected up and down (under the level).

### What are the benefits of working with XLiner Remote App?

XLiner Remote enables you to control line lasers via Bluetooth from your smartphone:

- select operation mode (switching on/off) of laser emitters, adjust the combination of required planes;
- activate pulse mode for working with receiver;
- adjust laser power to save the battery charge;
- monitor the battery level.

Remote control of a line laser is an absolute innovation that only CONDTRON instruments possess.

### What is the difference between rotary lasers and line lasers?

Rotary lasers have a higher accuracy, a wider working range and a different kind of the alignment. Line levels are convenient when working indoors at distances up to 100 m. Rotary levels are used in road and industrial construction, for example, stadiums, shopping centres and railway lines with a length of more than 100 m. When working with a rotary laser, make sure to use a laser receiver.



## NON-DESTRUCTIVE TESTING INSTRUMENTS

### How do moisture meters of Hydro series work?

The operation principle of a moisture meter is based on the measurement of electrical resistivity: it depends on moisture contained in the material. The device generates an electrical impulse with a penetration depth of up to 30 mm without destroying the material and evaluates the loss of this field depending on the humidity and density of the material. In addition, the correlation dependences of the electric field on humidity are recorded in its memory.

### How to calibrate a coating thickness meter?

Calibration is very important thing if you are going to work with coating thickness meter, because it influences the accuracy of measurements. The device is supplied with 6 coating samples and a metal plate. Calibrate CONDTRON Paint Check in less than a minute! Just select the calibration mode and make successive measurements, starting with a metal plate and continuing with measurements of all 6 coating thickness samples. Next, you can measure the thickness of the desired object and get precise measurement results.

### What is the difference between an infrared thermometer and a thermal imager?

An infrared thermometer differs from a thermal imager, because it can measure the temperature at only one spot. At the same time, the sensitive thermal imager is its matrix that consists of at least 1024 pixels. The matrix of more professional models can reach 49152 pixels.

### Why do you need RH Sensor in infrared thermometers?

RH sensor is a relative humidity sensor. This sensor allows you to determine air humidity. Combined with a temperature sensor, it allows to detect the dew point that may lead to mold formation.



## NON-DESTRUCTIVE TESTING INSTRUMENTS

### How to choose a thermal imager?

To find the right thermal imaging camera, you'll have to assess 4 major qualities:

- thermal sensitivity (NETD);
- measurement range;
- resolution of the IR matrix;
- advanced functions, such as video recording, broadcast via TV.

### What does NETD mean?

It is a characteristic of the matrix, which determines how small the registered temperature difference between two points on the surface can be. The minimum sensitivity index is 160mK (0.16°C), but modern devices are much more sensitive. They allow you to determine the barely noticeable temperature difference on the surface. For instance, the IR-CAM 3 thermal imager has a sensitivity index of 40mK (0.04°C).

### What does IR resolution of a thermal imager mean?

The IR resolution of a thermal imager determines the number of sensitive elements (elementary bolometers) and the clarity of the image. Each pixel is a display of the measured temperature at a specific point in the tested area. The better the resolution, the finer the details that can be distinguished on the thermogram to draw conclusions about the causes of temperature changes. For example, a device with a 160x120 matrix displays 19200 pixels, while a 320x240 matrix measures 76800 pixels.

### What distance should be maintained to make measurements with a thermal imager?

Temperature measurements depend on the optical resolution of the device.

As the distance from the device to the target increases, the size of the spot on the measured surface increases also. To determine the size of the measurement spot (S), you need to divide the distance from the instrument to target (D) into the coefficient of optical measurement. Thermal imagers have the working range - this is a thermal imager parameter that depends on the type of detector, detector size, detector pixel size, focal lens length, lens aperture, type and size of the observed object, thermal contrast of this object, thermal permeability of the atmosphere, observation conditions and criterion observations. For instance, a two-storey building 15 meters wide and 6 meters high can be inspected with IR-CAM2 Pro (viewing angle 35°x26°) from a distance of 30 meters, and with IR-CAM3 (viewing angle 56°x42°) from a distance of 22 meters.

### How to improve thermal imager accuracy?

It is recommended to choose a suitable color palette and carry out thermal imaging work on objects with a temperature difference of about 10/20 degrees.

### Why do you need to set emissivity in order to measure the temperature of different surfaces?

All objects emit thermal energy. The amount of emitted energy depends on the surface temperature and the emissivity of the object. Objects with different surfaces emit different amounts of thermal energy at the same temperature. Setting this emissivity allows the instrument to take this feature into account and minimize the measurement error. Set the emissivity (ε) from the table given in the manual.

### How to work with a wall scanner?

A wall scanner detects structures inside walls by determining the density of the material. Therefore, before starting work, it needs to be calibrated on the surface of the wall in the place where there are no structures. The scanner takes this density as a reference and detects any changes in this density.

### Polo shirt with CONDTRON embroidery

Dark blue casual polo shirt with embroidered logo.  
Structure: 60% cotton 40% elastane.

Size	Item nr.
L	6-1-132
XL	6-1-131
XXL	6-1-128



### Puffed sleeveless jacket CONDTRON

Lined puffed sleeveless full-zip jacket with printed logo.  
Structure: 100% polyester. Lining: 100% cotton.

Size	Item nr.
M	6-1-103
L	6-1-104
XL	6-1-079
XXL	6-1-090



### Backpack CONDTRON

CONDTRON backpack is made of wear-resistant and frost-resistant fabric. Main features are a USB port for charging gadgets with your powerbank, hidden inside of a backpack, waterproof locks and many pockets.

Item nr.	6-1-144
Dimensions	420x150x320 mm
Color	blue



### Table top acrylic display case

Product demonstration in a branded illuminated display case with a lockable door.  
It holds up to 4 devices.

Item nr.	6-1-2003
Dimensions	305x205x120 mm
Weight	2 kg

### Hanging illuminated CONDTRON display case

Product demonstration in a branded illuminated display case with a drawer.  
It holds up to 12 devices.

Item nr.	1-7-111
Dimensions	1002x330x300 mm
Weight	29 kg

### CONDTRON 180 cm illuminated floor standing display case

Product demonstration in a branded illuminated display case. It holds up to 30 devices.

Item nr.	0-00-005
Dimensions	1796x550x350 mm
Weight	96 kg



### Stylish and modern watches CONDTRON

Silver alloy case with rubber bracelet. Clock mechanism with three hands. The dial and hands glow in the dark. Water resistant up to 5 ATM.

Item nr.	6-1-107
----------	---------



### Screwdriver set CONDTRON

49-piece screwdriver set: ergonomically shaped handle and bits with different slot types. Made of chrome vanadium steel. Packed in an aluminum case.

Item nr.	6-1-0136
Dimensions	71x172x21 mm
Weight	284 g



### Tyre inflator CONDTRON

Tyre inflator with high air injection speed. Battery operated. Made of metal and plastic.

Item nr.	6-1-0137
Dimensions	170x69x50 mm
Weight	600 g



### Meat thermometer

Professional thermometer for grill and BBQ. Thermometer is equipped with a sensitive temperature probe and a display that allow you to control different levels of meat doneness.

Item nr.	5-0-014
Dimensions	32x345x26 mm
Weight	83 g



### 3 in 1 LED desk lamp CONDTRON

LED desk lamp 3 in 1 - LED table lamp, alarm clock, wireless charging station for phone and smart watch with printed logo.

Item nr.	6-1-093
Dimensions	80x200 mm
Weight	350 g



### Folding ruler CONTROL

1m fibre-reinforced plastic folding ruler with printed logo.

Item nr.	6-1-014
Colour	Red
Dimensions	30x130x20 mm
Weight	60 g



**CONDROL**  
REFERENCE MEASURE

CONDROL GmbH

Im Wiegenfeld 4

85570 Markt Schwaben

Telephone: +49 (0) 8121 428 9195

[gmbh@condtrol.de](mailto:gmbh@condtrol.de)



[www.condtrol.com](http://www.condtrol.com)

