



# LIGHT SOURCE CATALOGUE



**NORUCO**  
HAVE A LOOK INSIDE



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We are a large, pioneering company in the health sector, based in the south of Europe. The people that make up Noruco have an extensive background and knowledge of the sector, making more efficient products.

Our competitive advantage is sustainable over time, and lies in active listening, to implement technological advantages in the day-to-day lives of medical professionals. To demonstrate this, we present to you the points that sum up what Noruco is all about.



All of our products comply with the relevant legal requirements that Noruco is all about.



We grow from the inside so that we can also grow outwards, with an ambitious expansion plan.



Being efficient means being sustainable.



Our best guarantee is always being there.



Integrity + tenacity gives us solid results that last.



Our R&D&I department researches and implements continuous improvements in order to innovate with our products.



We hold out our hand to the best partners who want to join forces with us.



We are great listeners, and that helps us create optimised products.



 **NORUCO**



Output



Olympus



Wolf



Stryker

Input

Wolf

Olympus  
Stryker

Storz

AC

# LED<sup>A</sup> 2K

The Noruco LED 2K Series light combine power with efficiency in an extraordinary way. The LED light technology of a Xenon 300 W light source and all this with extremely silent operation Long life, economy, ecology and performance are the concepts that best define these light sources.

- High brightness LED (2.000 lm)
- Color temperature 5.700° Kelvin
- Microcontrolled system
- Compatible with the most common light cables on the market
- Low energy consumption with Standby function



# LED<sub>2K</sub>

The touch screen of the Noruco LED light source 2K, 2K+ and 2K2 offers the user a simple and intuitive user interface, which directly reproduces all relevant data to the user. The lifetime of the Noruco LED 2K Series sources is 30.000 heures and, therefore, 60 times longer than comparable xenon light sources (approximately 500 heures). Economy and ecology go hand in hand.

- High brightness LED (2.000 lm)
- Color temperature 5.700° Kelvin
- Microcontrolled system
- Compatible with the most common light cables on the market
- Low energy consumption with Standby function and auto-off of the screen
- 7" touch screen with very intuitive interface
- Attractive and customizable design



 **NORUCO**







# LED 2K<sup>+</sup>

The light source Noruco LED 2K + has a light fiber state tester, for it uses high quality components giving a result in very accurate and safe measurements. The Noruco LED 2K Series light sources have a flicker-free brightness and greater hygiene. This occurs thanks to its efficient ventilation system and its automatic disconnection system when detecting the extraction of light fiber.

- High brightness LED (2.000 lm)
- Color temperature 5.700° Kelvin
- Microcontrolled system
- Fiber optic cable tester
- Compatible with the most common light cables on the market
- Low energy consumption with Standby function and auto-off of the screen



- 7" touch screen with very intuitive interface
- Attractive and customizable design

# LED<sub>2K<sup>2</sup></sub>

The light source Noruco LED 2K2 offers the possibility of using two endoscopes at the same time having double output, which work independently. With the generation of the Noruco LED 2K Series, all the requirements for white light sources are now met and are ideal for all types of endoscopic intervention.

- High brightness LED (2.000 lm)
- Color temperature 5.700° Kelvin
- Microcontrolled system
- Compatible with the most common light cables on the market
- Low energy consumption with Standby function and auto-off of the screen
- 7" touch screen with very intuitive interface
- Attractive and customizable design
- Double output of independent work





# CABLE STATUS TESTER

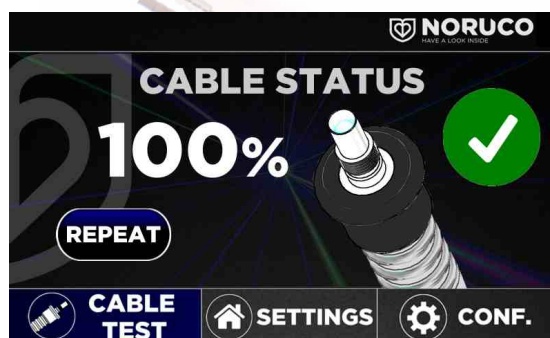
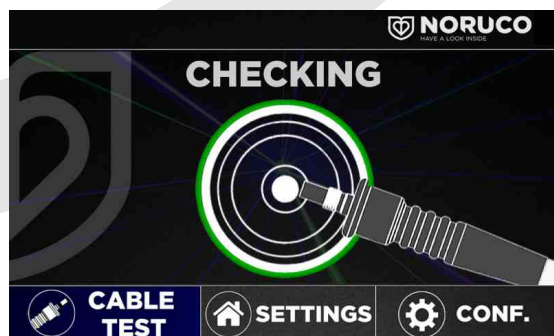
The Noruco LED 2K + light source has the possibility to check the status of the light cables, for it uses high quality components, giving a very accurate and safe measurement result. You can use the tester with any type of connection from both the endoscope and the light source and from any manufacturer. This avoid unnecessary substitutions and keeps our light transmission systems always in optimal condition. The equipment facilitates the work of both the medical / surgical personnel and the maintenance personnel.



Easy to use, very intuitive interface to perform the cable check.

Precise measurements, in just 5 seconds you can check the exact ones. Results, thanks to the use of high quality components. You can repeat the test as many times as you want.

Designed and manufactured in Spain by **NORUCO**





# MANUFACTURING OF EQUIPMENT IN OEM

**NORUCO**, by controlling all the manufacturing processes of the equipment, provides the opportunity to manufacture OEM products.

You can add your private label to your catalog immediately. This saves you costs, development processes, production costs and, most importantly, certification, since our products have the necessary certifications for their distribution.

Partnering with an experienced manufacturer such as Noruco ensures that products bearing your name will always meet the latest technological standards. We offer you the opportunity to obtain anticipated benefits of new developments and technological advances, which we regularly incorporate into our products. As a result, you can always expect competitive products of the highest quality.

We also offer additional endoscopy equipment, such as rigid endoscopes or light cables, which can be integrated into your product range.



\*OEM Equipment Simulation

The technical specifications are subject to change. The information is not legally binding. The contents are only for information about our products. Reprinting, in whole or in part, is not allowed. Medical devices can only be marketed and used in countries where regulatory authorities have approved their sale. For information on access to the available market, contact us.





# ACCESORIES: RIGID ENDOSCOPES

The clear vision of our optics allows an effective work. We value, above all, the most fundamental aspects. Therefore, resistance and good vision are the main characteristics of our optics.

They cover a field of vision of great amplitude and its degree of luminosity greatly facilitates the work. The design line is ergonomic, being the body of the optics its main characteristic. Our anthropometric studies confirm they adapt to the hand of the professional, so they are much more comfortable.

In addition, they have a rough surface that favors heat dissipation. All these characteristics make our rigid optics the perfect tool for the professional in the operating room.

We only create compatible products with different medical equipment.

- HIGH IMAGE RESOLUTION
- ERGONOMIC DESIGN
- HIGH QUALITY MATERIALS
- LARGE FIELD OF VISION
- COMPATIBLE WITH OTHER EQUIPMENT



ISO 13485:2016  
Reg. No. DE-531383 MP2016



ISO 9001:15  
Reg. No. 0.04.16084  
ISO 14001:15  
Reg. No. 3.00.16048

# OPTIONS AND POSSIBILITIES

We advance, we innovate, we evolve... Our creations help us to take steps towards the future. In this way, we managed to devise special optics for innovative techniques, always under study of R & D & I and prototyping. In addition, your company will be present in your new optics.

Our goal is to respond to your needs. At present we develop different types of optics that exist in the market. Furthermore, after an assessment of it, we can create any new product that suits you.

Your logo will appear on them by customized laser engraving. In this way, you can have more ordered your operating room materials.



# ACCESORIES: RIGID ENDOSCOPES

## REFERENCES

### ARTHROSCOPES (10)

#### CONNECTION 01 Ø4mm L175mm

0°	1001.0
30°	1001.30
45°	1001.45
70°	1001.70

#### CONNECTION 02 Ø4mm L170mm

0°	1002.0
30°	1002.30

#### CONNECTION 03 Ø4mm L142mm

0°	1003.0
30°	1003.30

#### CONNECTION 04 Ø4mm L160mm

0°	1004.0
30°	1004.30

#### CONNECTION 06 Ø4mm L155mm

0°	1006.0
30°	1006.30

### CYSTOSCOPES (20)

#### CONNECTION 01 Ø4mm L301.5mm

0°	2001.0
12°	2001.12
30°	2001.30
70°	2001.70

#### CONNECTION 02 Ø4mm L300mm

0°	2002.0
12°	2002.12
30°	2002.30

#### CONNECTION 03 Ø4mm L293mm

0°	2003.0
30°	2003.30

#### CONNECTION 05 Ø4mm L282mm

0°	2005.0
12°	2005.12
30°	2005.30

### HYSTEROSCOPES (30)

#### CONNECTION 01 Ø2.7mm L302mm

0°	3001.0
12°	3001.12
30°	3001.30

#### CONNECTION 02 Ø2.7mm L317mm

0°	3002.0
12°	3002.12
30°	3002.30

### HYSTEROSCOPES (31)

#### CONNECTION 01 Ø2.9mm L302mm

0°	3101.0
12°	3101.12
30°	3101.30

#### CONNECTION 02 Ø2.9mm L317mm

0°	3102.0
12°	3102.12
30°	3102.30



**LAPAROSCOPES (40)**

***Ø10mm L322mm***

0°	4010.0
30°	4010.30

**LAPAROSCOPES (45)**

***Ø5mm L300mm***

0°	4500.0
30°	4500.30

**CONNECTION 01**  
***Ø5mm L291mm***

0°	4501.0
30°	4501.30



CONNECTION 01



CONNECTION 02



CONNECTION 03



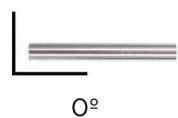
CONNECTION 04



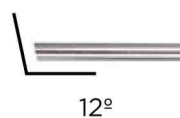
CONNECTION 05



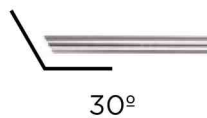
CONNECTION 06



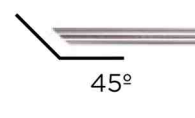
0°



12°



30°



45°



70°





We make compatible with the equipment  
installed in the center, whatever.



# ACCESORIES: COLD LIGHT CABLES

The excellent transmission and security of a long life make Noruco's cold light cables the best option for endoscopy and other medical light applications.

Its high temperature resistance allows it to be used with light sources. They are made from materials that guarantee the whitest light as well as greater flexibility, sturdiness and resistance.

They are made with quality German fibres, because the clarity of the light is a crucial factor.

We guarantee simple and efficient handling, ensuring our cables can adapt to all equipment and instruments; since they have a wide range of input and output adaptors.

Furthermore, a 90° angled connector can be included to optimise handling.

Noruco cold light cables comply with the requirements on the Law on medical devices and carry the CE approval mark.

**- INFINITE LUMINOSITY**

**- PROTECTIVE LENS IN THE ADAPTOR TO THE LIGHT SOURCE**

**- WIDE RANGE OF COLOURS**

**- CERTIFY QUALITY**



THE INTERNATIONAL CERTIFICATION NETWORK



Deutsche  
Akkreditierungsstelle



ISO 13485:2016  
Reg. No. DE-531383 MP2016



ISO 9001:15  
Reg. No. 0.04.16084  
ISO 14001:15  
Reg. No. 3.00.16048

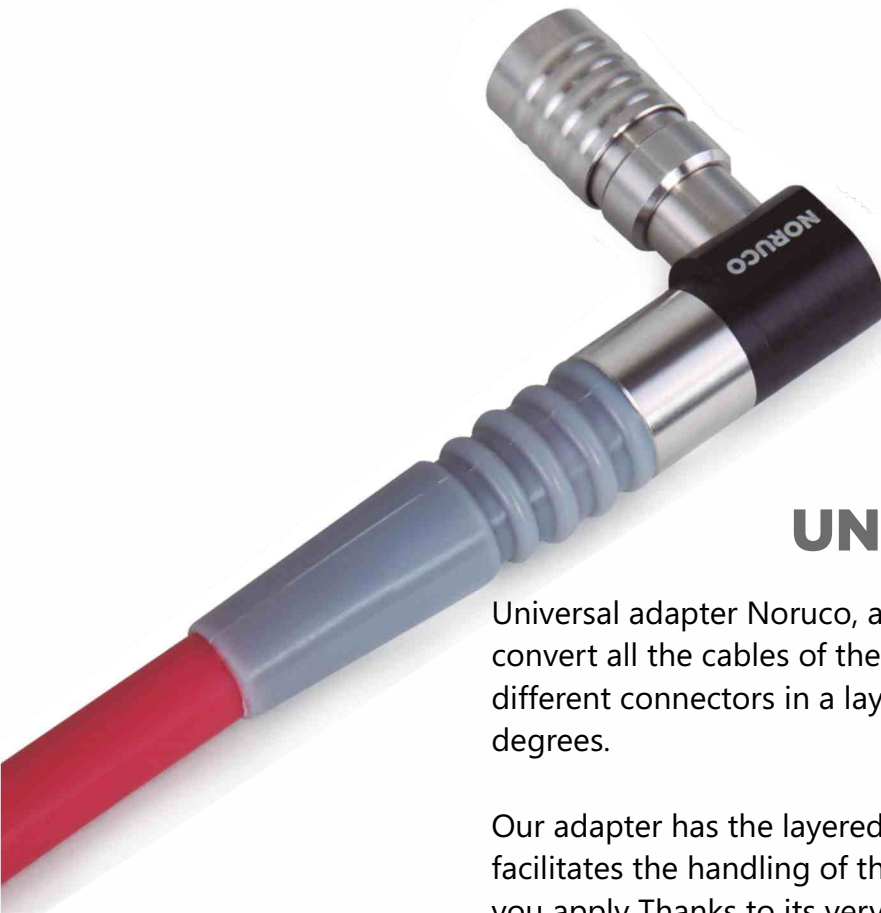


0297

# COATED CABLE

Our cables are designed for comfort of the professional. We offer a special cable composed of a connection 90° angle, which facilitates the management of it.

This system protects the cable from a forced position and eliminates excessive curvature of the same; avoiding twisting constant light fiber. So in addition to being more comfortable also increases your resistance



## UNIVERSAL ADAPTER

Universal adapter Noruco, allows to convert all the cables of the market different connectors in a layered 90 degrees.

Our adapter has the layered shape that facilitates the handling of the optics that you apply Thanks to its very light weight, the connection and disconnection of the different cables is very intuitive, which allows maximize and optimize professional time.







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# CUSTOMIZATION OPTIONS

## COMBINE DIFFERENT COLOURS WITH THE ADAPTORS YOU NEED

We offer the cable customization service according to our customers' needs.

We offer cables with diameters of 2.5 mm, 3.5 mm and 4.8 mm. They can be adapted to the length needed.

You can also personalise them with laser engraving.



# CUSTOMISE YOUR CABLE

## COLOURS AA



## STRESS BOOT BB



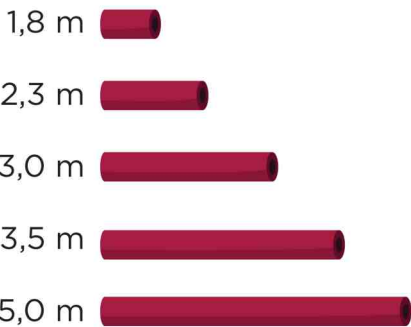
## ADAPTOR TO THE INSTRUMENT



## ADAPTOR TO THE LIGHT SOURCE



## LENGTH



## DIAMETER

2,5 mm Ø  
3,5 mm Ø  
4,8 mm Ø

## ANGLED CONNECTOR 90°



Add in REF: -90

## PERSONALISATION



Personalise your cable with a laser engraving.

# ACCESORIES: COLD LIGHT CABLES

## REFERENCES

COLD LIGHT CABLES		
REFERENCE	DIAMETER	LENGTH
2518.AABB	Ø2,5 mm	1,8 m
2523.AABB	Ø2,5 mm	2,3 m
2530.AABB	Ø2,5 mm	3,0 m
2535.AABB	Ø2,5 mm	3,5 m
2550.AABB	Ø2,5 mm	5,0 m
3518.AABB	Ø3,5 mm	1,8 m
3523.AABB	Ø3,5 mm	2,3 m
3530.AABB	Ø3,5 mm	3,0 m
3535.AABB	Ø3,5 mm	3,5 m
3550.AABB	Ø3,5 mm	5,0 m
4818.AABB	Ø4,8 mm	1,8 m
4823.AABB	Ø4,8 mm	2,3 m
4830.AABB	Ø4,8 mm	3,0 m
4835.AABB	Ø4,8 mm	3,5 m
4850.AABB	Ø4,8 mm	5,0 m

**AABB**

Customize the colour of your cable and stress boot adding in the reference the codes **AA** and **BB** shown on **page 27**.



## ADAPTOR TO THE INSTRUMENT



ACE01  
STORZ/OLYMPUS



ACE02  
WOLF



ACE03  
STRYKER



ACE04  
WOLF 2

## ADAPTOR TO THE LIGHT SOURCE



ACS01X  
STORZ



ACS02X  
WOLF  
Ø ORIFICIO: 7.6 MM



ACS03X  
STRYKER  
Ø ORIFICIO: 9.1 MM



ACS04X  
OLYMPUS



ACS05X  
OLYMPUS 2



ACS06X  
SCHOTT



ACS07X  
RIMMER



ACS08X  
FUJINON



ACS09X  
ZEISS




ACS10X  
ACM/ZEISS

# ACCESORIES: LIGHT CABLE TESTER

The Noruco NC10 tester gives the possibility to check the status of the light cables. For this, it uses high quality components, giving a very accurate and safe measurement result.





You can use the tester with any type of connection from both the endoscope and the cold light source and from any manufacturer, thus avoiding unnecessary substitutions and keeping our light transmission systems always in optimal condition.

The equipment facilitates the work of both the medical / surgical personnel and the maintenance personnel.

- EASY TO USE**

- VERY INTUITIVE INTERFACE**

- EXACT MEASUREMENTS**

- RESULTS IN ONLY 5 SECONDS**

- HIGH QUALITY COMPONENTS**

- REPETITION OF THE TEST AS MANY TIMES AS IT WANTS**

# LIGHT SOURCE

## TECHNICAL SPECIFICATIONS

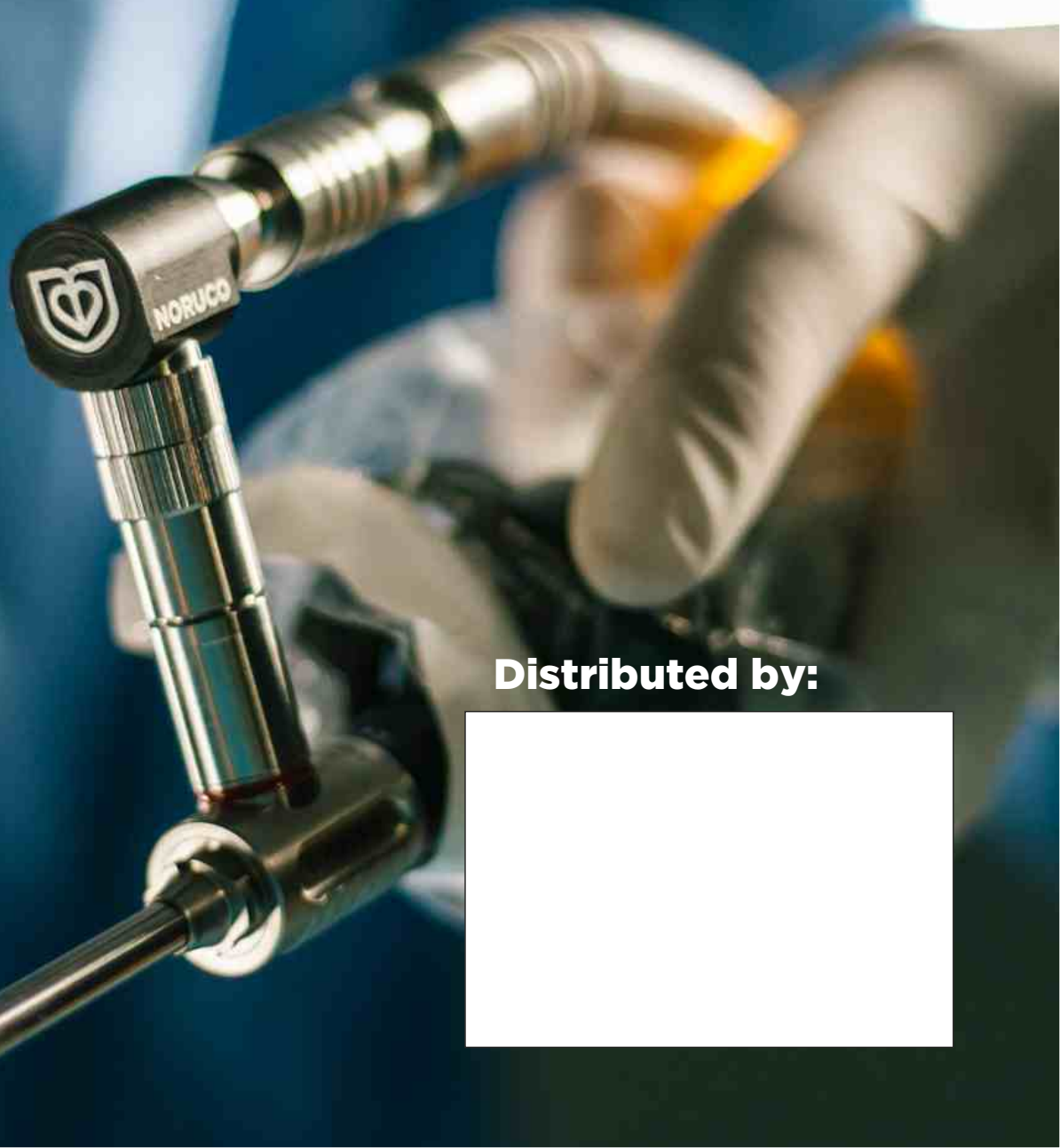
	Light source LED 2K <sup>A</sup>	Light source LED 2K	Light source LED 2K <sup>+</sup>	Light source LED 2K <sup>2</sup>
Number of LED	1	1	1	2
Light intensity at the usual working distance	2.000 lumens	2.000 lumens	2.000 lumens	2.000 lumens
Color Temperature	5.700° Kelvin	5.700° Kelvin	5.700° Kelvin	5.700° Kelvin
Life of LED's	30.000 hours	30.000 hours	30.000 hours	30.000 hours
Power feeding	100-240 V~ 50 - 60 Hz, 6,5 A max.	100-240 V~ 50 - 60 Hz, 6,5 A max.	100-240 V~ 50 - 60 Hz, 6,5 A max.	100-240 V~ 50 - 60 Hz, 6,5 A max.
Weight	7 Kg aprox.	7 Kg aprox.	7 Kg aprox.	7,5 Kg aprox.
Size (mm)	380 x 320 x 160	380 x 320 x 160	380 x 320 x 160	380 x 320 x 160
Screen	No	Tactile 7"	Tactile 7"	Tactile 7"
Electrical category	Class I	Class I	Class I	Class I

	Light source LED 2K <sup>A</sup>	Light source LED 2K	Light source LED 2K <sup>+</sup>	Light source LED 2K <sup>2</sup>
<i>Regulation</i>	<p>- EN60601-1-2:2015 + EN60601-2-18:1996 + A1:2000.</p> <p>- EN 60601-1:2006 + AC:2010 + A11:2011 + A1:2013 + AC:2014 + A12:2014 + EN60601-2-18:1996 + A1:2000.</p> <p>- EN 62304:2006 + AC:2008 + A1:2015.</p> <p>- EN 60601-1-6:2010 + A1:2015 + EN62366:2008 + A1:2015.</p>			
<i>Cable Detection</i>	No	Yes	Yes	Yes
<i>Fiber Optic cable tester</i>	No	No	Yes	No
<i>Economy mode</i>	Yes	Yes	Yes	Yes
<i>Warranty</i>	2 years	2 years	2 years	2 years









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