



INT-RJ / -SM / -MM

Installation manual



Preserve this manual as a reference for future needs.

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How to contact us

If you have any comments or queries concerning any aspect related to the product, do not hesitate to contact:

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Used electrical, electronic and stainless steel products should not be mixed with general waste. For proper treatment, recovery and recycling of old products, take them to applicable collection points, in accordance with your national legislation and the Directives 2011/65/EU and 2012/19/EU.

By disposing of these products correctly, you help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For more information about collection and recycling of old products, contact your local municipality or your waste disposal service. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.





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Description

Safe Area (SA) camera housing

The SA camera housings can be fitted with “direct to fiber” outputs by using the INT-SM for Ethernet over single-mode or INT-MM for Ethernet over multimode fiber. The INT-RJ interface offers an RJ45 interface for 100 Mb Fast Ethernet.

Safe Area cameras are not available with an external cable tail.




Hazardous Area (Ex) camera housing

The Atex or EX camera housings require a pre-installed cable tail. The INT-RJ5 or INT-RJ10 define a EX cable tail for 100 Mb Fast Ethernet of 5 or 10 meter. INT-SM5 or INT-SM10 defines a single-mode connection with a 5 or 10 meter multicable and INT-MM similar for multi-mode. The cable is terminated by two Ex d barrier glands on both sides. At one side connected to the camera, at the other side of the cable the fiber is fitted with SC connectors and the power and data cable cores are fitted with ferules.








Before you continue

	Prior to installation and operation, carefully read all instructions in this manual and heed all warnings.
	Unpack this equipment and handle it carefully. If the package appears to be damaged, notify the shipper immediately.
	Use the original packaging to transport the unit. Disconnect power supply before moving it. In case of returning the equipment, the original packaging must be used.
	Any change performed on the unit that is not previously approved by the manufacturer will void both the certification and the warranty.
	This equipment has been designed to fit in harsh environments requiring little or no maintenance. Suggested inspection interval is 6 months, but extremely harsh environments may require more frequent inspection and maintenance checks. On each inspection check the O-ring seals and the eventual window wiper blade integrity. Replace them if necessary.
	Make sure that the installation surface can support at least four times the weight of the unit in normal operating conditions. In case of excessive external stress (e.g. vibration, strong winds or impact), the equipment may need additional means of protection.
	Clean the surface of product with a damp cotton cloth.
	To maintain the IP rating of the unit, adequate cable glands must be used. The unit must be tightly closed when operating.
	Open only the covers pointed out in this installation manual. Other covers should be open only by the manufacturer.
	For security reasons, install the unit out of the reach of children.
	For security reasons, do not install the unit in the proximity of water containers and never push objects or pour liquids into the unit. The unit can be safely used in damp environments or outdoors, as long as the glands or connectors are properly sealed.
	After the installation of the unit, the desiccant bag must be placed inside the unit, assuring it won't be damaged by rotating and moving parts
	All the electrical connections should be realized in a non-explosive atmosphere.
	Before performing any operation, turn off the power. The installation of the unit can be performed only by qualified personnel in accordance with the relevant code of practice (e.g., EN60079-14) and with all the relevant local and national standards including but not limited to the use of special pipes, tapes, sealants, cables and glands.
	When leaving the unit unused for long periods, disconnect supply cables.
	Ensure that the unit case is properly earthed, connecting all the earth ground studs. Earth cable should be about 10mm longer than the other cables on the connector, in such way that it won't be accidentally disconnected if the cable is stretched or pulled.
	When a fiber optical cable is used on the equipment it shall be suitably protected against mechanical damage.
	The camera must be installed so that the risk of impact on the dome is low.





Installation of the unit

	Make sure that the installation surface can support at least four times the weight of the unit in normal operating conditions. In case of excessive external stress (vibration, strong winds or impact, for example), the equipment may need additional means of protection.
	Proper stainless-steel hardware (grade A4 or 316) should be carefully chosen to fasten the unit to the surfaces. Proper tools should be used during the installation, in accordance to environmental requirements.
	Dome covers should be opened only by the manufacturer.
	Electrical connections (such as plugs and cords) must be protected from potential hazardous environmental factors (e.g. foot traffic, hitting objects).
	Pointing the camera at the sun may damage it.
	Complete the installation performing the camera connection referring to the manual of the camera.
	Carefully check the supply voltage marked on the label. An incorrect power supply voltage may damage the unit. Do not overload the terminal connection, as it may cause a fire or electrical shock hazard.
	To protect the installation for overcurrent, install a delayed fuse T (Time delay) of at least 4 A or fuse of 10 A max. Or equivalent resettable devices such as magnetothermal fuses. These ratings include inrush current for startup or temporary overload. It must be very quickly recognizable and readily accessible.
	For connection to the 24Vac use a multipolar cable having minimum 3x1,5 mm ² (15 AWG). The mains cable must be protected.
	An all-pole mains switch with an opening distance between the contacts at least 3 mm in each pole must be incorporated in the electrical installation.
	Make sure that the unit case is properly earthed. The Protective Earth (PE) connection is included in the 3p or 5p power connector. The minimum wire size is 2.5 mm ² copper stranded wire.
	Fasten all the cables inside the housing with cables ties or other fixing means to avoid the electrical contact with surrounding parts in case cables get loose.
	Do not connect the unit to a supply circuit unless the installation is completed
	To maintain the certification requirements and the IP rating of the unit, adequate certified cable glands must be used. Each unused cable gland hole must be closed using a proper plug suitable for the housing marking.
	Check the proper position of the O-ring seals in their groove
	Keep the unit tightly closed when operating.
	Disconnect the equipment from the supply circuit and wait at least five minutes before opening.





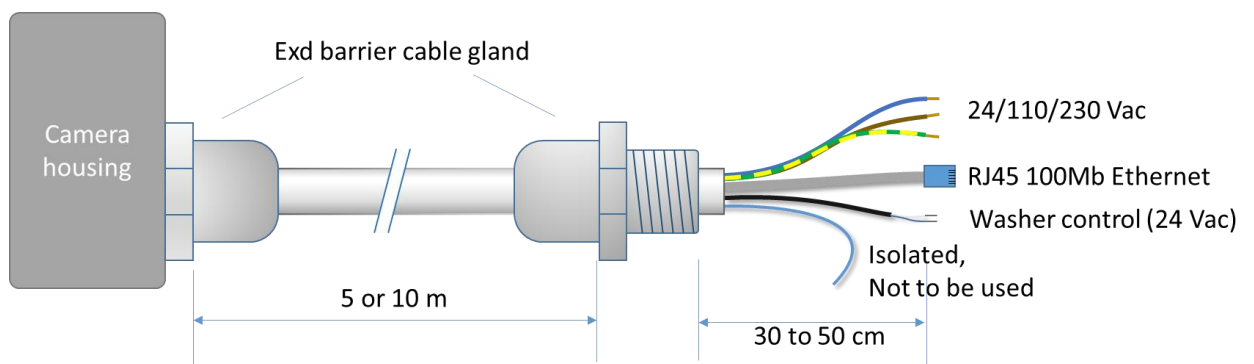
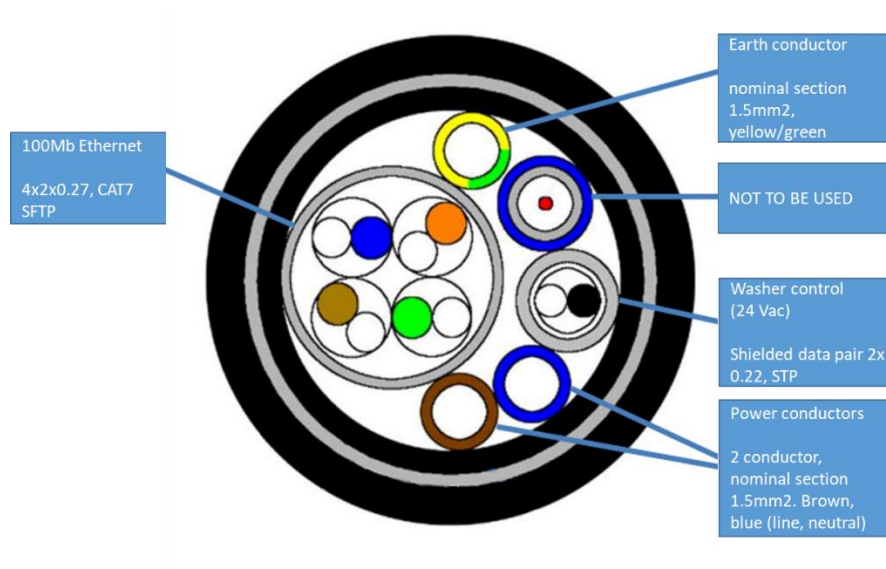
Installation instruction

INT-RJ, INT-SM, INT-MM

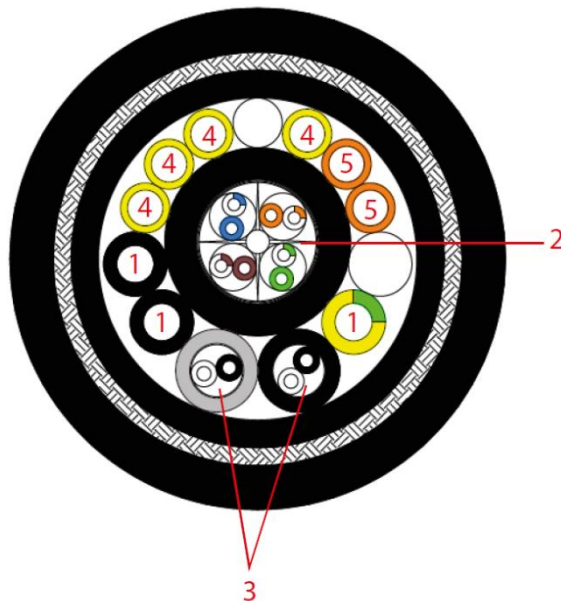
The interfaces are located in the camera. Refer to the camera's installation manual for more information.

Cable glands and cable are not included.

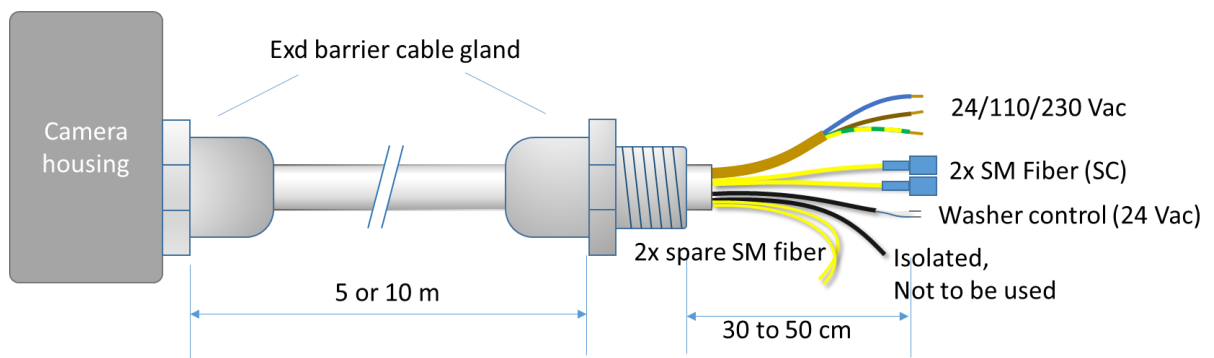
INT-RJ5, INT-RJ10



INT-SM5, INT-SM10



1. 3x 1.5mm² (Black1 - N, Black2 - L, Yellow/green - PE)
2. 4x 2x 0.53 mm, Cat. 6A, F/UTP Black (Not Connected)
3. 2x 2x 0.22 mm², FTP.
 - a. Grey jacket: Washer control (24Vac)
 - b. Black jacket: Not connected
4. 4x 9μm/125μm (OS1). 2x terminated with SC, 2x spare (not connected)
5. 2x 50μm/125μm (OM2). Not terminated



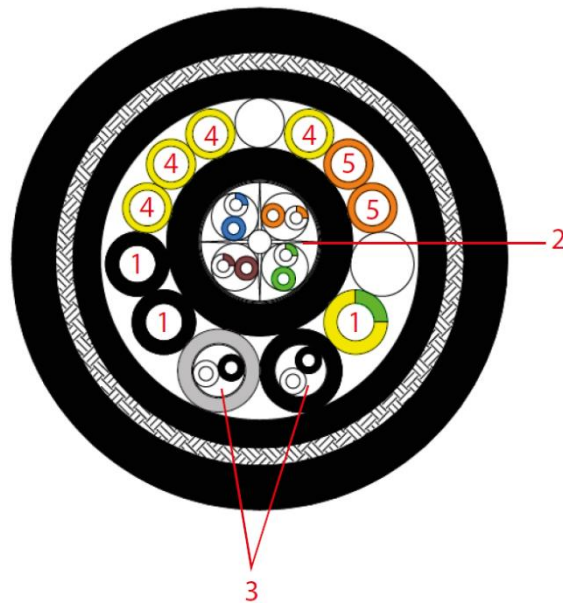
Spare fibers

The two unterminated SM-fibers can be used as spare if one of the originals breaks or gets serious damaged. Inside the camera and at the end of the cable the spare pigtails have 30 cm to 50 cm slack, respectively. When one of the original fibers are damaged, specialized and trained personnel can terminate the cable with the SC optical fiber connectors.

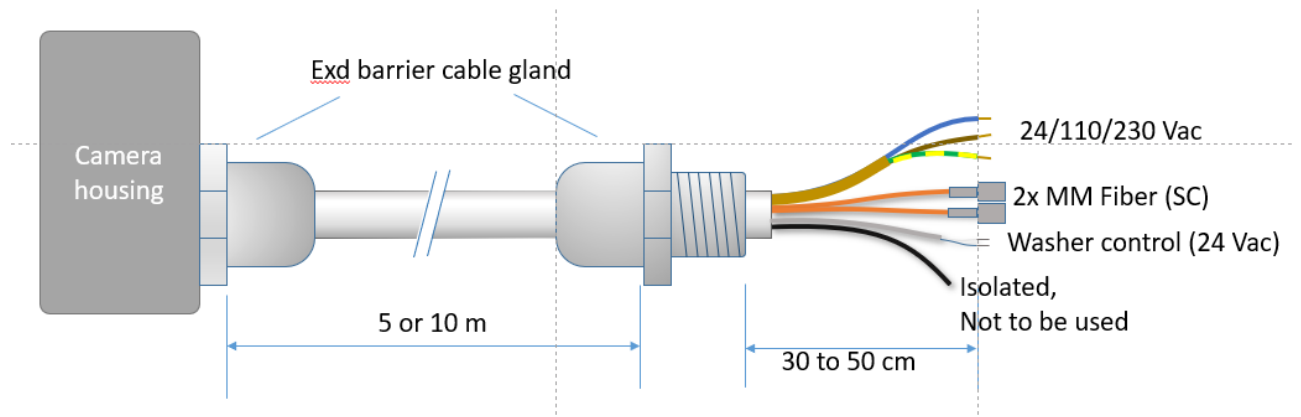
Note: Please, make sure that the unused, spare fibers are carefully and tightly stored in the junction box, so that they can be used later when necessary.



INT-MM5, INT-MM10



1. 3x 1.5mm² (Black1 - N, Black2 - L, Yellow/green - PE)
2. 4x 2x 0.53 mm, Cat. 6A, F/UTP Black (Not Connected)
3. 2x 2x 0.22 mm², FTP.
 - a. Grey jacket: Washer control (24Vac)
 - b. Black jacket: Not connected
4. 4x 9μm/125μm (OS1). Not connected
5. 2x 50μm/125μm (OM2). Terminated with SC





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