



## DESCRIPTION

Kapteos fibre extension eoLink™ allows you to carry out or extend electric (E) field measurements to a great distance, like outdoor conditions.

## APPLICATIONS

When measuring high E field strength, the measurement and data acquisition systems must be positioned outside the test area, usually in a shielded shelter. This is typically the case for:

- measurements on high voltage devices,
- work with HPEM sources for electromagnetic aggression assessments,
- E field measurements inside a MRI tunnel for SAR assessments.

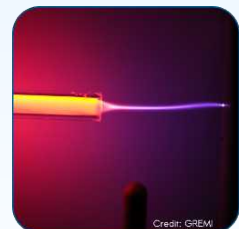
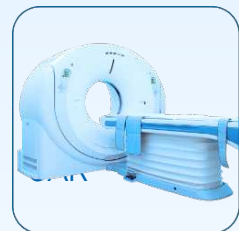
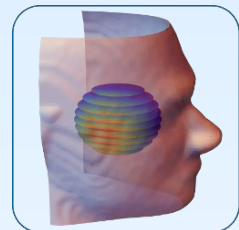
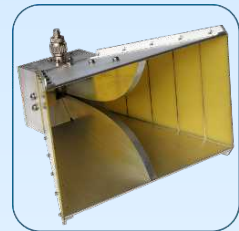
Regardless of your application, the fibre extension composition must be fully dielectric in order not to interfere with the E field to be measured.

Depending on the environmental conditions, you can choose between:

- a standard 15-m long fibre extension **EXT15**,
- or a ruggedized fibre extension **EXTxx-R** with a length ranging from 15 m up to 95 m.

## SERVICES

Each fibre extension is delivered with a routine test report. Vacuum compatible fibre extensions eoLink™ for ELx-vac or ETx-vac probes can also be produced on specification.



Your key partner for electromagnetism  
in harsh environment

## COMMON FEATURES

Compatible probes	ELx-air probes, ETx-air probes, ELx-bio probes, ETx-bio probes
Optical connector	Souriau Duplex UTS-LC/APC
Insertion loss	< 0.6 dB
Connector Durability	500 matings
Connector Repeatability	< 0.2 dB
Composition (excluding connectors <sup>1</sup> )	Fully dielectric, <b>no metal part</b>

<sup>1</sup> A metal spring is integrated with the optical connectors

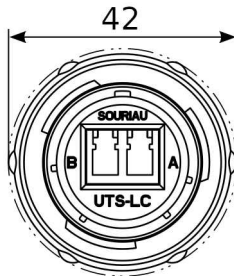
SPECIFIC CHARACTERISTICS	EXT15	EXT15-R	EXT25-R	EXT50-R	EXT95-R
Fibre length (m)	15	15	25	50	95
Fibre sheath outer diameter (mm)	2.8	9.5	9.5	9.5	9.5
Static bending radius (mm)	> 50	> 80	> 80	> 80	> 80
Fibre sheath compression resistance (daN)	N/A <sup>2</sup>	90	90	90	90
Fibre sheath traction resistance (daN)	N/A <sup>2</sup>	80	80	80	80
Weight (kg)	0.25	1.3	2.0	3.7	6.9

<sup>2</sup> Not Applicable

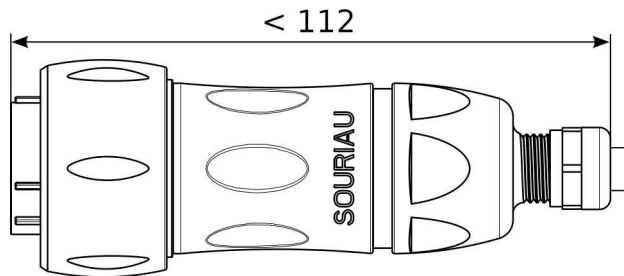
## FIBRE EXTENSION DESCRIPTION

Drawings of eoLink™ at scale 1:1 - Dimensions in mm (± 0.25 mm unless otherwise noted)

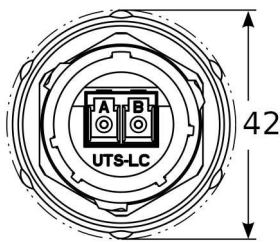
connector-to-eoSense™ front view



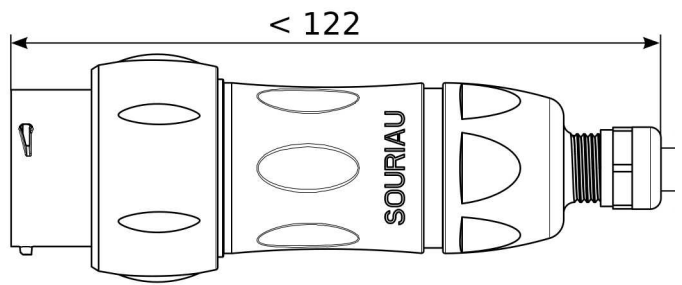
connector-to-eoSense™ side view



connector-to-eoProbe™ front view



connector-to-eoProbe™ side view



## RUGGEDIZED FIBRE SHEATH CROSS SECTION (for eoLink™ EXTxx-R)

Drawing not to scale



- Black polyethylene
- Aramid protection
- Optical fibres

## OPERATING CONDITIONS <sup>(2</sup> Max. 8h per day in case operating conditions are harsher than storage conditions)

Temperature <sup>2</sup>	0°C → +50°C (+32°F → +122°F)
Pressure	690-1075 hPa (10-15.6 psi)
Bending radius <sup>2</sup>	40 mm min. for <b>EXT15</b> and 80 mm min. for <b>EXTxx-R</b>
Cleaning	Use cloth moistened with clean water mixed with < 20% of isopropyl alcohol ( <u>only for</u> the outer part of the connectors and the fibre sheath)

## STORAGE CONDITIONS

Storage	Only in its original case in a clean, dry environment
Temperature	+10°C → +40°C (+50°F → +104°F)
Relative humidity	< 90% - non-condensing
Pressure	690-1075 hPa (10-15.6 psi)
Bending radius	50 mm min. for <b>EXT15</b> and 80 mm min. for <b>EXTxx-R</b>

## CONTENTS LIST

Fibre extension	Delivered with a routine test report
Transport case	Cardboard with protective foam
User guide	cf. eoLink User Guide PDF file GU-eoLink

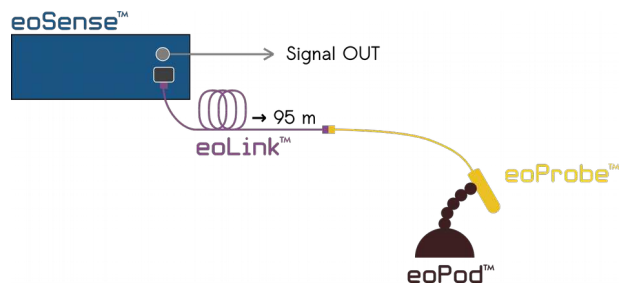
## COMPATIBLE DEVICES & ACCESSORIES

Optoelectronic converter	eoSense (cf. related data sheet FT-eoSense)
Field probe	eoProbe (cf. related data sheet FT-eoProbe)

## APPLICATIONS INFORMATION

### Remote setup

Required setup from a great distance, like outdoor conditions



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