eoPod™

MAIN FEATURES

- Articulated probe holder for straightforward positioning of E-field probes
- Mount for up to 3 E-field probes incorporating a bubble level
- Immersible metal-free holder, MRI compliant
- Harsh environment compatibility like vacuum, pressure, temperature
- 25 kV_{rms} contact withstand voltage
- Set of 3 separable elements: silicon base plate, articulated arm & probe holder
- Intended for use with E-field probes eoProbe™
- Fine adjustment of **ET**X probe line sensitivity axis with respect to bubble level

TYPICAL APPLICATIONS

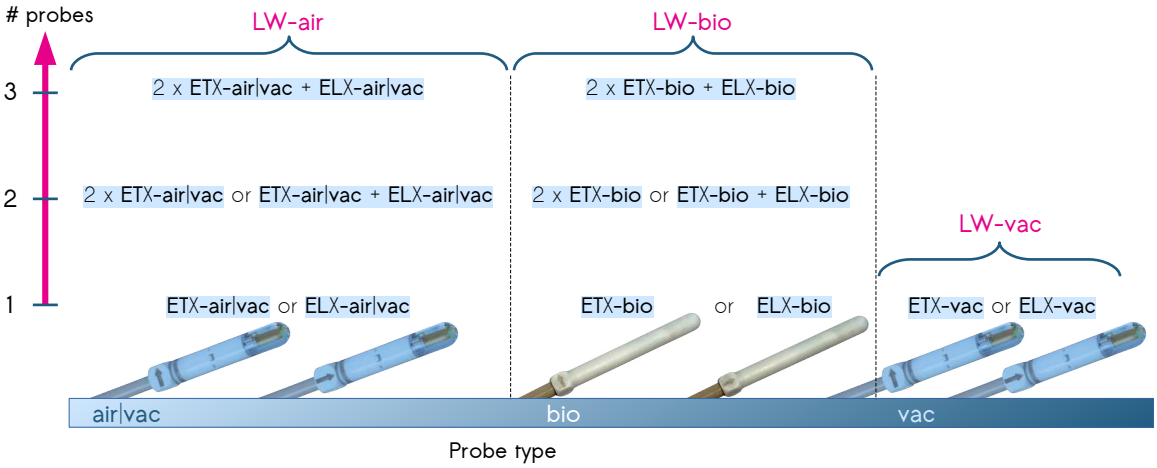
- Antennas characterization
- SAR assessment in phantoms
- Plasma characterization
- MRI compliance for electronic implants
- Field mapping of high voltage devices
- EMC malfunction diagnosis
- EMP measurement

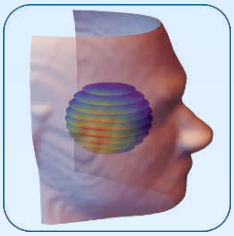
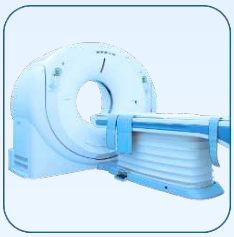
Health
Science
Defence
Aerospace
Telecommunications

PRODUCTS LINE

Types of holder:

- LW-air line for **air|vac** probe line,
- LW-bio line for **bio** probe line,
- LW-vac line for **vac** probe line with additional protective sheath against intense UV, X & γ rays.



Your **key partner** for **electromagnetism** in **harsh environment**

PERFORMANCE SPECIFICATIONS

		Min	Typical	Max	Unit
ETX probe axis marker correction for air and bio lines only	misalignment angle after correction		±1	2	°
	induced restricted selectivity	30	≥ 35		dB
Density	for immersion purpose	1.08	1.11	1.14	
Withstand	voltage	25			kV_{rms}
	magnetic field	4.7			T
	permanent PD[1] (f < 10 GHz)	0.1			W/cm^2
3 E-field component meas. voxel for air and bio lines only (cylinder)	diameter for LW-air		10.5	11	mm
	diameter for LW-bio		8.75	9.25	
	length for EX1 probe		1.5	2	
	length for EX5 probe		5.5	6	
Holder tip dielectric constant	ε_r' for f < 300 GHz	2.75	2.8	2.95	
	tan δ @ 1 GHz		$2\ 10^{-3}$		
	tan δ @ 3 GHz		$3\ 10^{-3}$		
	tan δ @ 10 GHz		$6\ 10^{-3}$		
	tan δ @ 30 GHz		$11\ 10^{-3}$		
	tan δ @ 100 GHz		$21\ 10^{-3}$		

[1] Power Density.

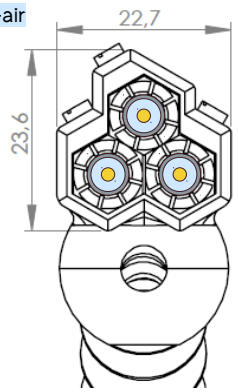
MECHANICAL SPECIFICATIONS

		Min	Typical	Max	Unit
Inter-probe distance (equilateral triangular grid)	LW-air		9		mm
	LW-bio		7.5		
Articulated arm length			280		mm
Silicon base plate diameter			100		mm
Weight		310	330	350	g
Ingress Protection rating			IP68		

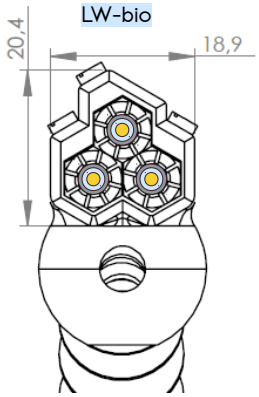
TRANSDUCER - Drawings at scale 1:1 - Cross section with 3 probes mounted on holder

transducer sheath
electro-optic crystal

LW-air

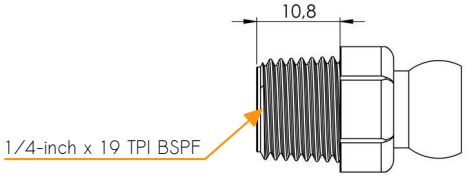


LW-bio



ARTICULATED ARM

base thread - Drawings at scale 1:1 - Dimensions in mm (± 0.2 mm)



For specific requirements, the articulated arm and its probe holder can be mounted directly on any support with a 1/4-inch x 19 TPI BSPF threaded hole (cf. customer-defined setup on last page).

As part on its on-going product improvement, Kapteos reserves the right to modify the specifications of the product described in this document without notice.

PROBE HOLDER TIP

LW-air

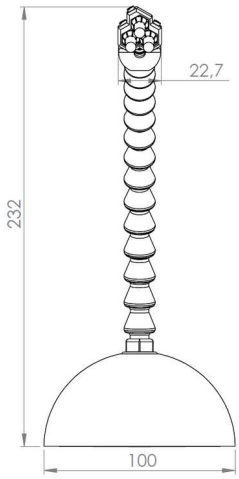
LW-bio

LW-vac

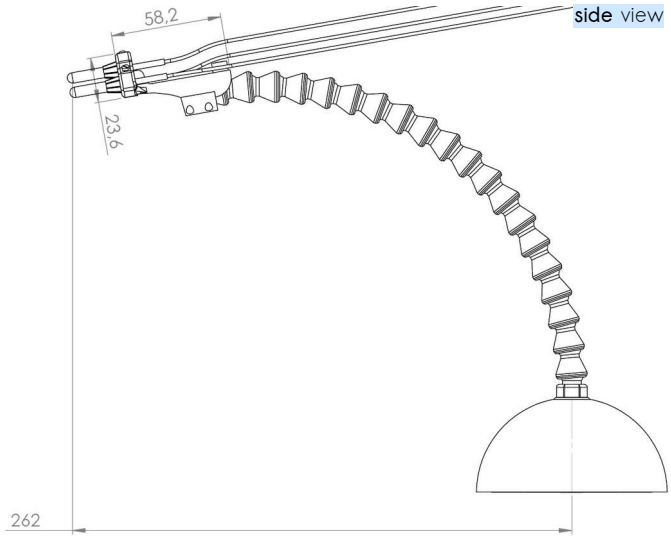
PROBE HOLDER OVERVIEW **LW-air** - Drawings at scale 1:4

Dimensions in mm (± 0.5 mm unless otherwise noted)

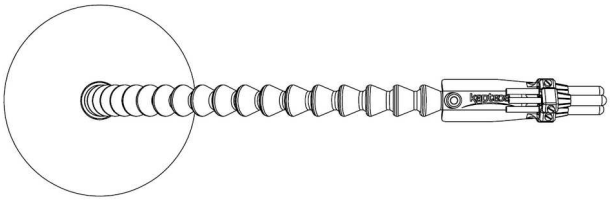
front view



side view



top view



ENVIRONMENTAL SPECIFICATIONS

		Min	Typical	Max	Unit
Temperature	operating[2]	10		50	°C
	storage	10		40	
Pressure	operating[2]	1		2 000	hPa
	storage	690		1 075	
Storage	only in its original case in a clean, dry environment				
Holder cleaning	wash with dishwashing product and rinsed with clean water				

[2] Max. 8h per day in case operating conditions are harsher than storage conditions

PACKAGING INFORMATION

	Contents
eoPod™ holder	Delivered with an embedded bubble level & a three-probe holder
Transport case	Cardboard with protective foam (W x D x H = 185 x 165 x 105 mm - Weight: 170 g)
Other parts	1 screwdriver
User guide	cf. eoSystem User Guide PDF file GU-eoSystem

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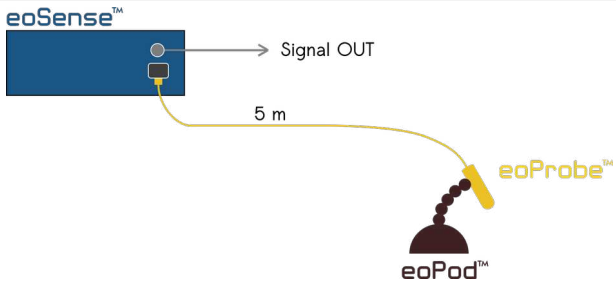
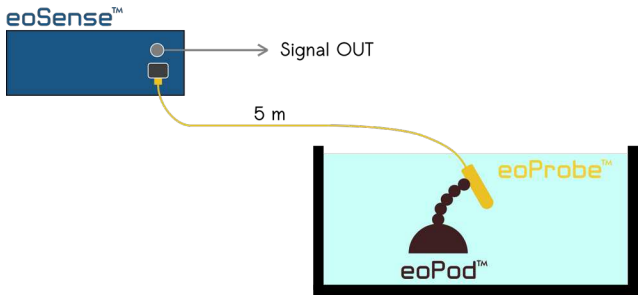
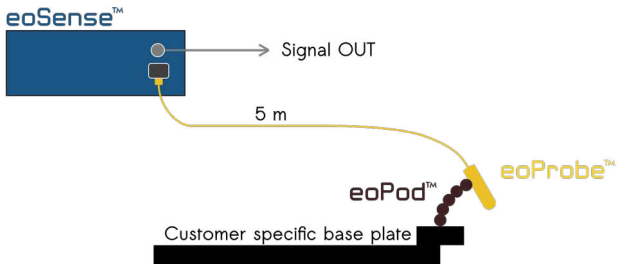
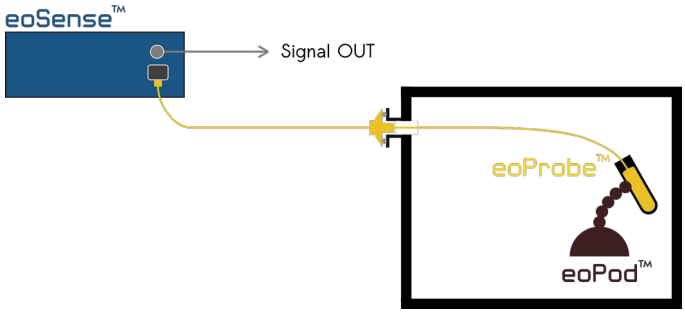
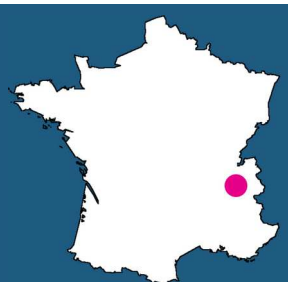
COMPATIBLE DEVICES & ACCESSORIES

	Device-related data sheet	Use	Outline schematic
E-field probe eoProbe™	FT20-eoProbe-05.pdf	Recommended setup in most cases	
		Immersed setup for measurements in phantoms	
		Customer-defined setup	
		Setup for high field EMP generated by laser-plasma interaction	



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