




Cliniporator: Electrodes and Handles

Three different electrode types have been developed in order to treat any cutaneous and subcutaneous lesion and perform a safe and effective use of electrochemotherapy in clinical daily practice. Thanks to the well defined distribution of the applied electric field, these electrodes allow the clinician to apply an effective electroporation – the physical principle on which electrochemotherapy is based.



The three different types of electrode are: **plate electrodes (also plates), linear needle electrodes, hexagonal needle electrodes.**

The details of the various types are reported in the table below.

Electrode	Aspect	Electrode description	Used for lesions:
P-30-8B		Plate linear array (Plates), 30 mm length (30), 8 mm distance between the plates (8), connection to the blue handle (Blue)	Superficial And exophytic
N-10-4B		Needle linear shape, length: 10 mm (10); distance between rows of needles: 4 mm (4); Blue handle	Small, exophytic and subcutaneous
N-20-4B		Needle linear shape, length: 20 mm (20); distance between rows of needles: 4 mm (4); Blue handle	Small, exophytic and subcutaneous
N-30-4B		Needle linear shape, length: 30 mm (30); distance between rows of needles: 4 mm (4); Blue handle	Small, exophytic and subcutaneous
N-10-HG		Needle Hexagonal shape, length: 10 mm (10); distance between neighboring needles: 7 mm; Green handle	Big, exophytic and subcutaneous
N-20-HG		Needle Hexagonal shape, length: 20 mm (20); distance between neighboring needles: 7 mm; Green handle	Big, exophytic and subcutaneous
N-30-HG		Needle Hexagonal shape, length: 30 mm (30); distance between neighboring needles: 7 mm; Green handle	Big, exophytic and subcutaneous

The electrodes are supplied by the manufacturer (IGEA) already γ-rays sterilized; They are disposable (mono-session) and cannot be resterilized. The electrodes sterilization expires in 5 years.

The electrodes are connected to the device by means of two types of handles, sterilizable 20 times in the autoclave at caoutchouc cycle (121°C, 15 minutes). The two handles types are shown below.

Handle	Aspect	To be used for electrodes
Blue Handle		P – 30 – 8B; N – 10 – 4B; N – 20 – 4B; N – 30 – 4B.
Green Handle		N – 10 – HG; N – 20 – HG; N – 30 – HG.