



## GENEDRIVE TECHNICAL DATA

### General Information

Power Part Model: EGT01  
Manufacturer: IGEA S.p.A. Via Parmenide, 10/A 41012 Carpi (MO) Italy  
Panel PC: ONYX-1731 – Onyx Healthcare Inc.

### Power Supply Specifications

Main switch voltage 100 - 240 VAC  
Main switch frequency 50 - 60 Hz  
Maximum power input 160 VA  
Protection fuses 2 type T 2.5A 250V – 5 x 20 mm Breaking Capacity: 35A L

### Environmental Conditions

#### Working conditions

Room temperature from 10 °C to 40 °C  
Relative humidity from 30 % to 75 %  
Atmospheric pressure from 700 hPa to 1060 hPa

#### Transport and Storage Conditions

Room temperature from -20 °C to 50 °C  
Relative humidity from 10 % to 90 %  
Atmospheric pressure from 500 hPa to 1060 hPa

### Operating mode

GENEDRIVE is suitable for continuous use. However, it is recommended to turn off the device after every treatment session.

### Technical Specifications

Dimensions Panel PC + Free Standing Riser (Width x Length x Height): 32 x 38 x 55 cm  
Weight Panel PC + Free Standing Riser: 8.7 Kg  
Dimensions Power Unit (Width x Length x Height): 30 x 59 x 30 cm  
Weight Power Unit: 15.7 Kg  
Output channels: 2  
Max. pulse energy (nominal): 0.5 J each monopolar HV pulse  
44 J single LV pulse



## High Voltage Pulses

High voltage pulse may be unipolar (i.e. a single “positive” pulse), or bipolar (i.e. a “positive” pulse immediately followed by a reversed, “negative” identical pulse).

The following table shows the maximum and minimum values for each parameter considered alone. The product of Number of Pulses times Pulse Duration cannot exceed 3000  $\mu$ s.

Number of Pulses	0 - 8 (Positive) – 0 - 3 (Bipolar)
Pulse Amplitude	100 - 500 Vpp (Positive) – 200 – 1000 Vpp (Bipolar)
Pulse Length	10 - 1000 $\mu$ s (Positive) – 20 - 1000 $\mu$ s (Bipolar)
Rise Time	< 200 ns at 500 V
Pause between pulses	20 - 999950 $\mu$ s
Dead-time (Bipolar only)	2 $\mu$ s between positive and negative pulses
Maximum Deliverable Current	5 A
Pulse Amplitude Accuracy	$\pm$ 5 % (Positive) – $\pm$ 10 % (Bipolar)
Pulse Length Accuracy	$\pm$ 2 $\mu$ s (Positive) – $\pm$ 4 $\mu$ s (Bipolar)

## Low Voltage Pulses

Low voltage pulses can either be “positive” i.e. have the same polarity as high voltage pulses, (or the first half of bipolar pulses) or “negative”, i.e. reversed polarity with respect to high voltage pulses (or have the same polarity of the second half of bipolar pulses).

The following table shows maximum and minimum values for each parameter considered alone. Total low-voltage pulse length cannot exceed 400 ms.

Number of Pulses	0 - 4
Pulse Amplitude	20 – 100 V
Pulse Length	1 – 400 ms
Pause between Pulses	2 – 10 ms
Maximum Deliverable Current	1.1 A
Pulse Amplitude Accuracy	$\pm$ 5 %
Pulse Length Accuracy	$\pm$ 1 % or 0.1 ms
Pause between High Voltage and Low Voltage Pulses	1 - 10 ms

IGEA S.p.A.

## Accessories and separable parts

- Two-button Handset Controller for commanding pulse output
- Ethernet cable (1 m)
- Panel PC's Power Adapter
- Two power cords
- Cuvette Base (optional)

GENEDRIVE's output connector is compatible with all IGEA's bipolar electrodes.

## End of Life Disposal

The end-of-life disposal of GENEDRIVE does not cause any risk for the environment or the personnel, provided that the device and the electrical parts given as accessories are disposed in accordance with the national regulation in force for the disposal of electric or electronic equipment.

## Disclaimer

Specifications and accessories are subject to change without notice.

Genedrive technical specifications – November 2019