



A DIVISION OF J&S

# Fisiocomputer

*Made to Last*



# LTS-60

## Power Scanning Laser

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Laser therapy applied to physiotherapy for therapeutic purposes consists in using the effects of electromagnetic energy generated by two laser sources. The acronym L.A.S.E.R. stands for light amplification by simulated emission of radiation. The flow of the laser, penetrating the tissues, causes biochemical reactions on the cell wall and inside the mitochondrion, producing different effects including, for example, vasodilation and increased lymphatic drainage.

LTS-60 is designed for the use of laser at a certain wavelength (1064 nM) for therapeutic purposes in different pathologies that require an accurate and non-invasive power. The interaction between laser light and living tissues, composed of an aqueous solution capable of absorbing light, is risk-free and, essential for the patient, does not cause pain.

The intended use is high power laser therapy with the following therapeutic indications: tendinitis, muscle contractions, trauma, osteoarthritis, rheumatoid arthritis, arthritis, ulcers and bedsores, scars, edema, Bell's paralysis, impingement syndrome, radiculopathy.

This frontier of the Laser application allows LTS-60 to have a continuous emission of 6 Watts, guaranteed by a sophisticated optical group, which allows the entire system to achieve a remarkable precision in the areas to treat, excellent even in the small ones. All this combined with a perfectly collimated guide light to the main laser beam. The LTS-60 comes from the intelligent combination of available technologies and the latest knowledge on the application of laser light, designed to achieve an ideal depth for therapeutic treatments. Moreover, thanks to the 6 Watt emission, which can be continuous or pulsed, the treatment time is greatly reduced, increasing at the same time the effectiveness of the therapy. The goal of this laser device of the Fisiocomputer's line is to give to the world of physical therapy a reliable and powerful ally that, thanks to the work of the company and the various principals that actively collaborate in the improvement of application protocols, can optimize to the maximum of the potential of the product through a series of specific protocols for the different treatable pathologies.

### Strengths:

- 6 Watt Emission, pulsed or continuous
- Absolute precision in the areas to treat
  - Highly reduced time of treatment
  - Specific protocols for tractable pathologies
    - Higher stability and precision due to the absence of handpiece
    - No protruding parts

## Physical Features:

- Used materials: base and body in fire-painted sheet steel RAL9006 e RAL9007, internal frame in galvanized and welded tubular steel.
- External dimensions: clutter in plan 500x600mm. (LxP), max height from the ground 1637mm.
- Total weight: 43 Kg.

### Description:

#### Fisiocomputer's LTS-60

It is presented as a floor tower inclined towards the emission side (conventionally defined as the back one) and it is fixed on a rectangular base big enough to ensure stability (and that hides the four wheels). At the front it presents the keyboard and the retroilluminated graphic display for the controls, besides the emergency key "stop" to the ignition key the two main fuses.

Behind, there is (on the top, slightly on the left) "LASER'S OPENING". The left side has a handle to facilitate the movement of the device. From the base goes out, through special cable gland, the main power cable and there's also the remote lock connector.

## Functional Features:

- Adjustment of treatment time: from 1' to 60'
- IR source of work: laser diod at high efficiency
- Wavelength 1064 nM
- Wavelength guide ligh: 635 nM
- Maximum continuous power: 6W (5mW the guide light) power regulation: from 0 to 100 % (guide light non adjustable);
- Emission regulation: from continuous to 5000 Hz, automatic calculation of the total energy supplied during the whole treatment, in joule;
- Scanning regulation: in horizontal width from +0° to +30° and speed from 0,25 a 2 Rad/sec, in vertical width from +30° to +85° from the vertical, fixed frequency;
- Alimentation:
- Net's characteristics: 230V-/50Hz;
- Net's absorption: 600 VA;
- Net's fuses: 2 rapid (5x20) of F6,3A
- Type of net's cable: fixed wih flexible cable gland
- Characteristics net's cable: 3x1 sq. mm flameproof (2mt);
- Net's plug: 10A+T p. 19mm.



# Our Story

J&S was born in December 1973 with the aim of designing, producing and commercializing electronic devices.

**1979** The activity focuses on medical devices, such as electrotherapies, and after that (1980) electromyography with the realization of a first model with wired logic and analog presentation on the screen, using for the first time in Italy, in this field, the microprocessor 6502.

**1981** A new line of apparatuses for electrotherapy is produced (DYA10A, SM50, Farad2S). It presents very innovative characteristics (the DYA10A is the first automatic “dyadinamic” produced in Italy.).

**1988** A second version of electromyography is made, this time with a microprocessor and possibility of examination of the nerves.

**1990** A new set of equipment for physiotherapy with microprocessor is designed. Then the name “Fisiocomputer” is chosen and patented in 1992.

**1991** It is the beginning of the sales of the model ET2 (electrotherapy with two outputs) and the entire line (complete with laser therapy, magnetic therapy, ultrasound) is presented to the Intersan in Milan.

**1992** In 1992 began also a very important collaboration with the Italian Air Force, specifically with the flight test center (CSV), on the clinical situations of the pilot under different flight conditions. More details on the over twenty years old collaboration with the CSV are available on our Aerospace section.

**1999** After three years of study and research, initially born in the field of oncology, the company receives the certification of an important machine for physical therapy: the Hyperthermia Fisiocomputer IP1.

**2002** It is designed and optimized a new Bio Feedback. The production of Power Scanning Laser, the Fisiocomputer LTS Line, starts.

**2004** It is certified the Multifunction Fisiocomputer UNIK4, which has a double output electrotherapy, magneto therapy, ultrasound therapy and laser therapy, each with the same power as the single products and with the possibility to set two therapies at the same time.

**2005** It starts the production of the Proprioceptive Platform Fisiocomputer PDN1.

**2007** The production of the cold ultrasound Fisiocomputer USF1 begins, with instant excellent results, thanks to its unique epicyclic function, that allows to simulate the convulsion of the handpiece on the treated area.

**2008** The frequency laser technology called “neodimioyag” is adopted, diode source with frequency 1064Nm, that from that moment becomes a standard for the high level physio-therapy, leading to the development of the Laser Fisiocomputer LTS-60.

**2013** Finalized the innovative Tecartherapy Fisiocomputer TK1, that includes top level elements, as a record of the experience and requests from the best italian professionals; the TK1 is a professional product that can also be portable and it carries many of the technologies that J&S has developed during the ten years partnership with the medical sector of the Italian Aeronautics.

**2016** A new system for the Total Body proprioception is realized. Thanks to this product, the direct “3D Realtime” translation of the interested parts, makes it possible to make ROM test that are precise and accurate, complex exercises and an objective analysis of the rehabilitation course, based on numeral evidences.

## PRODUCTS FISIOCOMPUTER

### Elite Line

- BFB4 - Double Channel Biofeedback
- IP1 - Hyperthermia
- LTS-60 - Power Scanning Laser
- MOVESCAN - 3D Proprioception and ROM Test
- OMNIA31 - Articular Rehabilitator
- TK1 - Tecartherapy
- UNIK4 - Multifunctional Device for Physical Therapy
- USF1 - Cryosonic

### Pro Line

- ET2 - Electrotherapy
- US1 - Ultrasound
- MG2 - Magnetotherapy
- BFB2 - Biofeedback
- TDR1 - Visual and Acoustic Reaction Time Meter

They are all Medical Devices **CE**

### BUSINESS PARTNER

[www.fisiocomputer.com](http://www.fisiocomputer.com)

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