

- Brachial neuralgia
- Bursitis
- Contusion
- Hematoma
- Muscular contraction
- Muscular tear
- Rotator cuff tear
- Scapulo-humeral periarthritis**
- Strain
- Shoulder dislocation
- Shoulder tendonitis

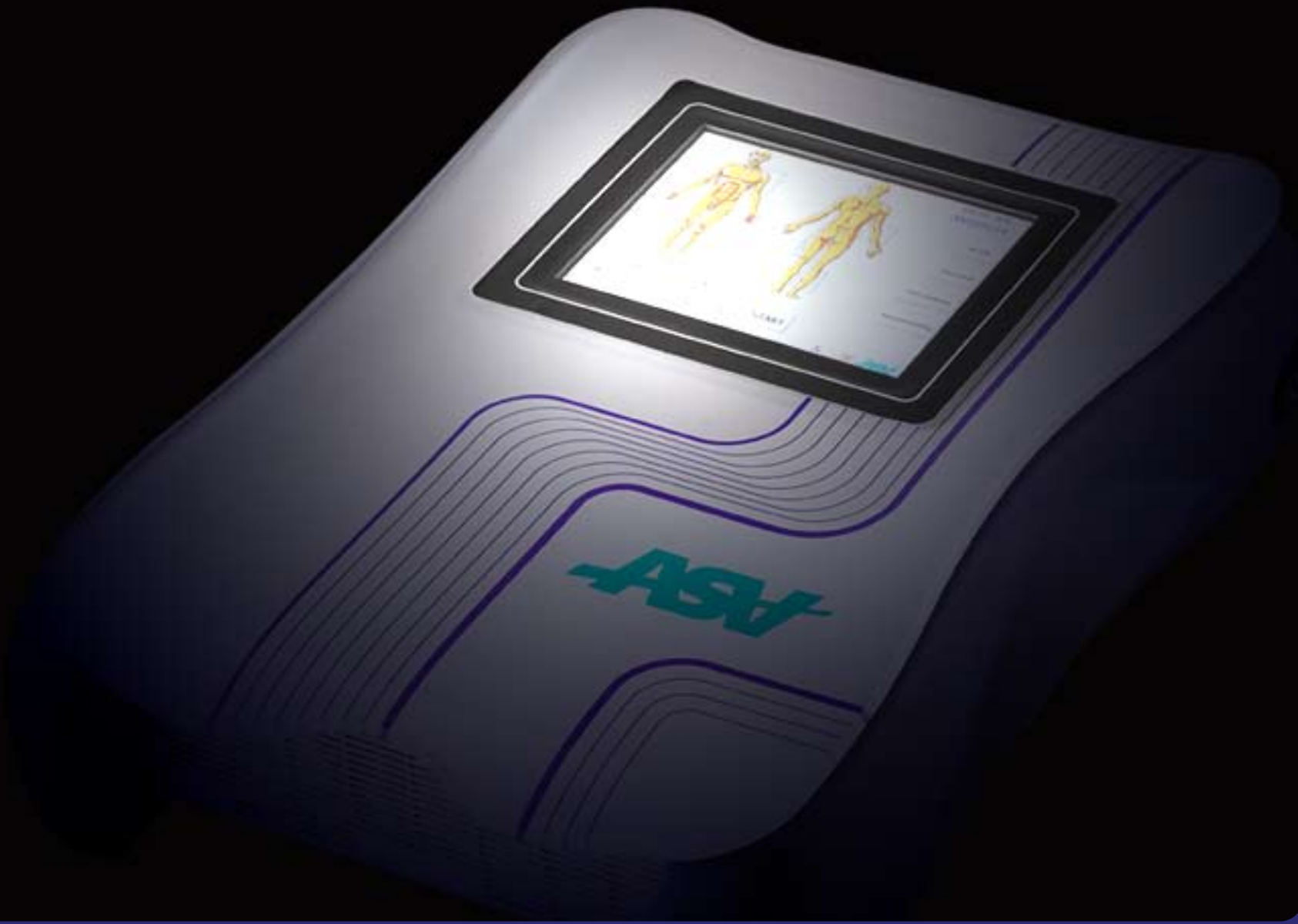


S    M    L   Size  
 A    B   Phototype

CPW:  Hz  
 Back:  Time  
 Int:   
 Point:   
 Joule:   
 START:  J/cm<sup>2</sup>

**Mphi**  
MLS Laser Therapy





ASV



# ASA, producing therapies

We look to provide immediate, long-lasting wellbeing, to reduce pain and allow for a return to normal life. We provide efficient medical devices to meet our patients' desires. We use a shared scientific culture and up-to-date, experienced specialists and physicians to provide concrete growth and development. A holistic\*, results-oriented approach: producing therapies.

\*Holistic concept: "the whole is greater than the sum of its parts" - Aristotele.



**1983**

**ASA is born!**

Based on a principle that is today a part of its DNA: to listen and interpret the needs of professionals and patients.



**27**

companies, together with ASA, making up the EI.En. group, sharing in the experience of a large group.



**3**

therapies we have developed giving rise to a proactive way of listening to our stakeholders.

# A challenge for the future, research in the present for



ASA Research Division

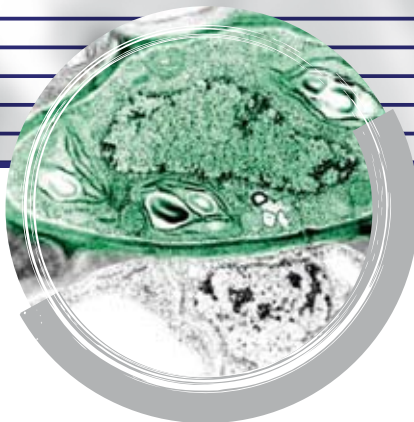
Acquiring knowledge, interpreting it, sharing it, widening horizons without limiting the future in order to change and improve the quality of life of those who suffer from painful osteo-muscular-articulate pathologies. These are objectives that solidify in ASAcampus, the research division of ASA with its operation nucleus in the laboratory of the Department of Clinical Physiopathology at Florence University, a collecting point of the scientific activity (basic and clinical research, training and popular activity) carried out on the premises and in Italian and overseas Clinical Centres and University Institutes by doctors and specialists who are a part of our continuously growing network of researchers. Our aims are to deepen the interactions between cells/tissues and physical type energies (laser radiation, magnetic fields, mechanical and gravitational stress), and to develop and improve new therapy methods, more evolved systems and technology, concrete ideas and innovations in a medical-scientific ambit.

**We believe in shared thought, a constant commitment, a challenge full of enthusiasm.**



## RESEARCH MOVES FOLLOWING 2 ROUTES

- **Basic RESEARCH**, the study of new instrumental strategic therapies:
  - three-dimensional cell cultures (3D)
  - nanoparticles
  - staminal cells (tissue regeneration - tissue engineering)
- **CLINICAL STUDIES**, the validation of therapy protocols.



## RESULTS BECOME SOLUTIONS

The daily activity of ASAcampus researchers translates concretely into **new therapy methods**, more advanced systems and technologies, and ideas and innovations for numerous medical-scientific ambits: **sport medicine, rehabilitation, physiatrics, physiotherapy, orthopaedics, muscular system pathologies.**



## SHARING DEVELOPS KNOWLEDGE

Scientific results are spread to and shared with the scientific and academic world through the **publication** of numerous articles in international indexed magazines and in the **ASAcampus scientific periodical "Energy for Health"**, as well as through the editing of specialist volumes, the organization and communication of meetings and active involvement in research projects.

# MLS, a solid contribution to research

Exceeding the limits of traditional laser therapy, developing greater knowledge on the combined effects of continuous and pulsed impulses, searching for an evolved system that permits faster, more aimed, and more efficient treatments. These answers have been developed by the ASA team of researchers and technicians thanks to wider scientific literature, in vivo and in vitro research and studies, tests and checks in medical structures of international fame. The results were applied to a new impulse, MLS Multiwave Looked System and as a result a new therapy method, MLS Laser therapy. Energy under control, synchronised and disciplined laser emissions that strengthen each other to supply the energetic mix necessary for a harmonic effect on pain.

## WAVELENGTH

The chosen wavelengths guarantee that energy is carried to deep tissues

808 nm  
905 nm

CONTINUOUS EMISSION  
anti-inflammatory  
and anti-edemic effects

PULSED EMISSION  
analgesic effects

## EMISSION MODALITY

The modality of the emission determines the prevalent therapeutic effect

## COMBINATION OF SYNCHRONIZATION

Synchronization through the MLS system gives rise to synergy and the strengthening of each single effect

MLS pulse

## THERAPEUTIC EFFECT

The marked analgesic effect and the intense anti-inflammatory and anti-edemic effect of the MLS impulse appear simultaneously, strengthening each other

Synergy and strengthening of therapeutic effects: intense anti-inflammatory and anti-edemic effect, strong analgesic effect

## ADVANTAGES

Considerable mitigation of symptomatology from the first applications, brief applications providing long-lasting results over time

Considerable reduction of symptomatology till its disappearance. Reduced treatment times and long-lasting results

## Better distribution, more absorption and penetration of energy

The specific synchronized action of MLS Laser Therapy, allows to obtain a complex light pulse, able to transfer energy to cells and target tissues with more efficacy compared to traditional laser emissions. Light distribution in the tissue is homogeneous (much more than in traditional Laser devices). The photoreceptors of the treated area are promptly activated thanks to an optimal energy dose and a great tissue volume is activated at the same time.



# Active again: thanks to MLS Laser Therapy!

Thanks to the MLS Laser Therapy devices, the patient overcomes the acute phase of pain rapidly, with long-lasting results and no side effects have been reported till now. The normal activities of everyday life, such as work, sports and social life can be resumed in no time. MLS Laser Therapy is a successful benchmark in ASA research. Its advantages are shared by medical centres alike, by universities and many of the most prominent hospitals in the World. The reason is that the MLS Laser Therapy has proven to be reliable, effective, and flexible. It is constantly being tested and studied in depth by a high-level international network. Moreover, the U.S. FDA has given its approval to the devices for MLS Laser Therapy (M1, MIX5 and M6). Success starts from achieving higher standards of care.

## INDICATIONS AND ADVANTAGES OF MLS LASER THERAPY

With only 3-5 applications an intense beneficial effect can be achieved. This guarantees optimal results both on pain and inflammation. With 10 sessions the pathologies can be fully managed.

- ARTHRITIS
- ARTHROSIS
- TENNIS ELBOW
- LOW BACK PAIN
- DORSALGIA
- CERVICAL PAIN
- SUPERFICIAL LESIONS



### PHYSICAL THERAPY AND REHABILITATION

What each patient wants is to get back into shape again, to regain the functions that were compromised by surgery or fracture: MLS Laser Therapy encourages rapid rehabilitation and a nearly immediate disappearance of pain.



### PAINFUL PATHOLOGIES

A new vital energy goes with the disappearance of the painful symptom in all the pathologies of the muscle-skeletal system: trophic, anti-phlogistic and antalgic therapy for low back pain, cervical pain, contusions, insertional pathologies, bursitis and peri-arthritis.



### SPORTS

Sports patients, even on a professional level, can be put back in the game again by healing the painful symptoms due to tendonitis, epycondilitis, traumas, strains and distortions.

# Mphi, MLS Laser therapy available everywhere

We know your requirements. Above all, we know they are very different. This is why we have developed an evolved Therapy that gives aimed and personalised applications to satisfy your every need efficiently and reliably. This is why Mphi, the first “portable unit” for MLS Laser therapy, was created. Easy to transport, ergonomic, easy to use, intuitive: a new opportunity for making the beneficial effects of MLS Laser therapy available everywhere, in your surgery or in the patient’s home.

The material used to cover the Mphi gives a pleasant and solid touch effect: it is a new generation, environment-friendly polymer that is totally recyclable, solvent free, and resistant to bacterial attacks.





# Simple and intuitive, the “teaching machine” for MLS Laser therapy

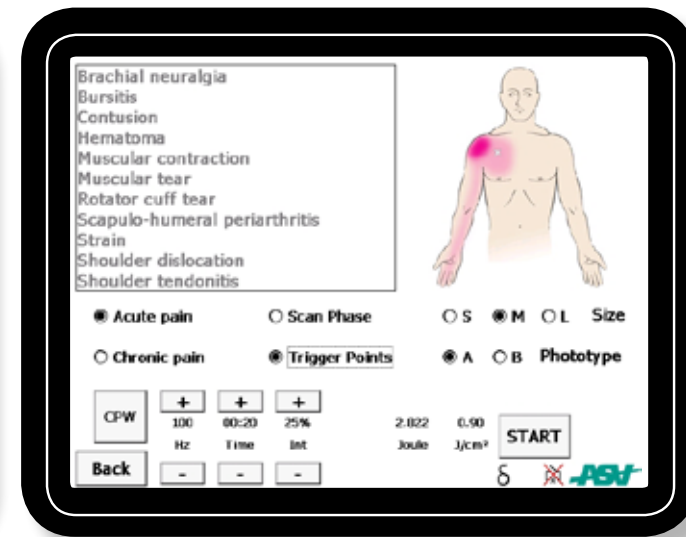
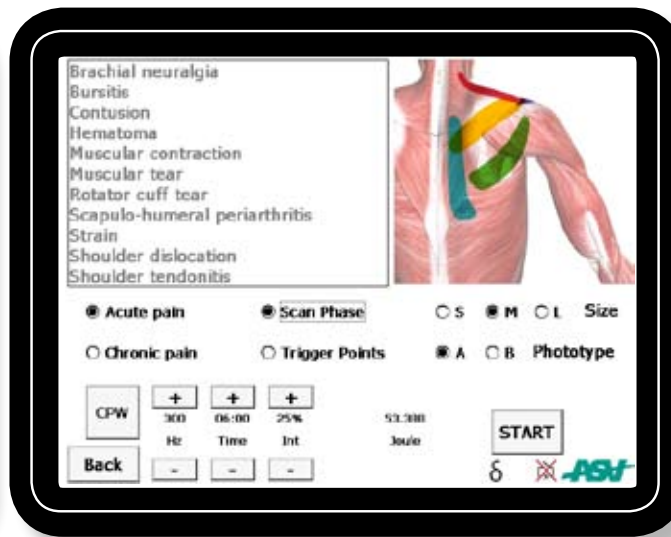
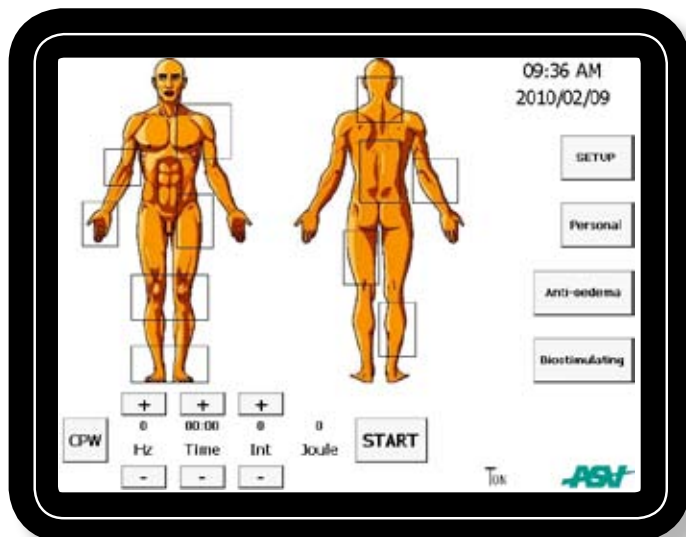
With its renewed interface logic, the Mphi touch-screen was developed to come closer to the personal therapeutic approach of the operator: 3 different use modes in “Pain management”, and another 2 for treating oedema and for biostimulation (injuries, ulcers, sores). The new software gives different treatment personalisation according to the “phototype” and “dimensions” of the patient: it is also possible to select “acute” or “chronic” values.

## USER INTERFACE WITH TOUCH-SCREEN COLOUR GRAPHIC DISPLAY

3 DIFFERENT USE MODES IN “PAIN MANAGEMENT” AND ANOTHER 2 FOR TREATING OEDEMA AND BIOSTIMULATION.

## AREA MODE

THERE ARE 2 PHASES: MANUAL SCANNING (Scan Phase) AND POINT TREATMENT (Trigger Points). THE OPERATOR IS GUIDED ON HOW TO CARRY OUT THE 2 PHASES, THANKS TO THE CONTINUOUS REPRESENTATION OF THE TREATMENT AREAS BEING SCANNED AND THE TRIGGER POINTS. IN THIS MODE MLS LASER THERAPY IS APPLIED TO THE TISSUE TO BE TREATED AND IN THE MUSCULAR GROUPS THAT ARE INVOLVED DIRECTLY AND INDIRECTLY.





### PATHOLOGY MODE

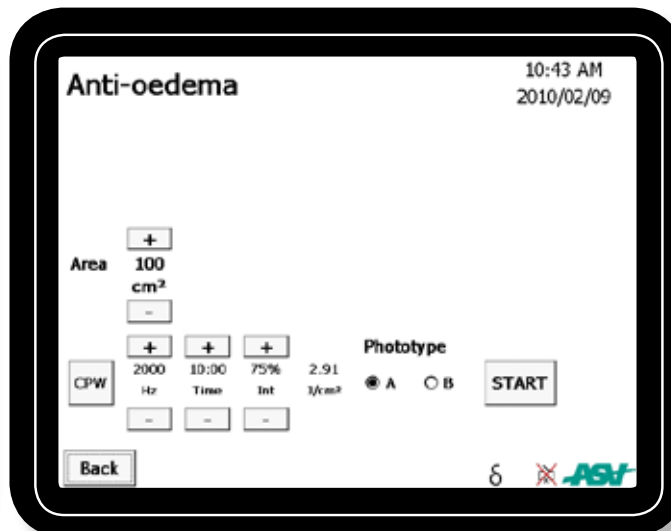
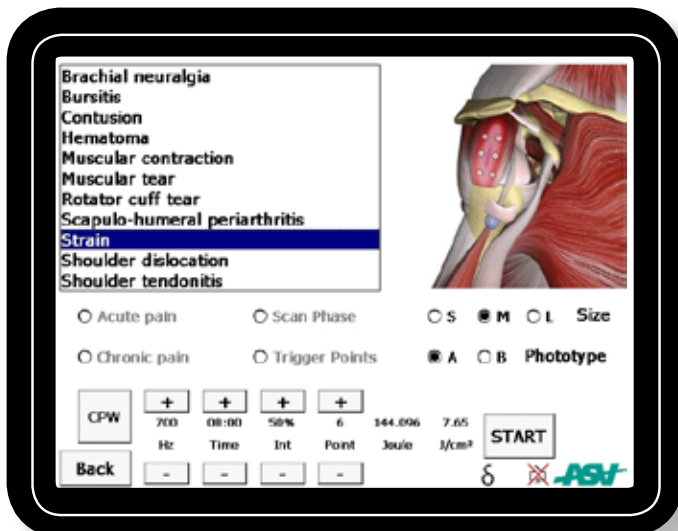
THE OPERATOR IS GUIDED THROUGH A LIST OF PATHOLOGIES REFERRED TO EACH SINGLE BODY AREA. WHEN THE PATHOLOGY IS SELECTED, A 3D ANATOMIC IMAGE OF THE HUMAN BODY APPEARS, CLEARLY INDICATING ALL THE SPECIFIC TREATMENT POINTS.

### ANTI-OEDEMA OR BIOSTIMULATION MODE

BY SIMPLY INSERTING THE DIMENSIONS OF THE AREA TO BE TREATED, THE OPERATOR AUTOMATICALLY OBTAINS THE PARAMETERS FOR STARTING THERAPY AT THE CALIBRATED ENERGY DOSE.

### MANUAL MODE

EACH TREATMENT PARAMETER IS INSERTED DIRECTLY BY THE OPERATOR.



# Mphi,

All the MLS technology,  
enclosed in an innovative handpiece

The new portable device for MLS Laser therapy blends quality with innovation for easy use, practicality, and therapy efficiency. Mphi is balanced and proportional, characteristics that can be clearly seen in its harmonic shape, its mix of function and logic, its completely recyclable materials, the choice of an innovative touch-screen that interacts with the operator in an intuitive manner, its power control with a harmonic effect on pain through an ergonomic handpiece. These aspects recall the “golden number” philosophy (abbreviated in  $\phi$ =phi), selected as a summary to represent the concept of the new portable device for MLS Laser therapy.



Mphi is equipped with an advanced user interface that has a backlit touch-screen colour graphic display. The new software, designed to meet the operator's needs, offers completely illustrated operation modes with anatomic images and treatment points.



The innovative and ergonomic handpiece is optimum for illuminating the muscular trigger points simultaneously and homogeneously.

## Mphi, great targeted energy

Mphi has been devised to apply MLS Laser Therapy on painful and trigger points, favoring therapeutic contact between the patient and the operator. The size of the Target Area of the handpiece, whose diameter is 2cm, is excellent to homogeneously and simultaneously work trigger points. After detecting them by palpation, it is possible to treat them with precision, one by one, approaching pain in a systematic way. Each treated point can be assessed after irradiation, and treatment can be repeated. Greater areas of the sensory nerves can be treated by manually scanning the handpiece on the desired area. Thanks to the even irradiation of the single point, and to the biostimulating properties of the MLS pulse, muscle pain decreases till it disappears completely. Treatment times to achieve this result are much shorter than with the traditional Laser Therapy.

### TECHNICAL FEATURES Mphi

- optical group with MLS source - power up to 1.1 W
- 2 cm diameter Target Area highlighted by high-efficiency red light LEDs
- High resolution LCD colour touch screen user interface
- simultaneous management of two independent channels
- 4 treatment modalities:
  - A) specific pathologies, B) pain management
  - C) anti-oedema D) biostimulation
- possibility to customize every treatment parameters
- CPW and FW MLS modulation from 1 to 2000 Hz with 1 Hz steps
- power level 25% 50% 75% and 100%
- variable or fixed duty cycle
- treatment duration from 1" to 99'59" with 1" steps
- automatic calculation of the emitted energy according to the settled parameters

### ALARMS AND SAFETY FEATURES

- laser emission warning light
- interlock
- acoustic signal selectable by operator
- date and time
- password to operate the device
- language option
- ready to be connected to the remote Laser emission signalling device

### DIMENSIONS AND WEIGHT

23 x 32 x 9cm; 4 Kg

### POWER SUPPLY

115/230V~ 50/60Hz 40VA





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