

**Pulsar**  
*Minimal Stress*



**OPTIKON™**  
Man and Technology

- Continuous micrometrical stroke length control & adjustment by *Minimal Stress* system (patented).
- High performance dynamic peristaltic pump.
- Power limit & Auto pulsed U/S.
- Up to 25 vacuum rise time levels.
- LCD screen.
- User friendly control software.



## TECHNICAL FEATURES

### PROGRAMMABILITY

- **PROGRAMS**  
10 user programs

### EQUIPMENT CONTROL

- **FOOTPEDAL**  
Single Linear, Single Linear left, Single linear MMP, Single I.V.Pole, Double linear, Double linear left

### IRRIGATION

- **IRRIGATING PRESSURE**  
Gravity fed
- **IRRIGATION CONTROL**  
Footpedal and arrow keys on frontal panel

### ASPIRATION

- **ASPIRATION PUMP TYPE**  
Peristaltic with single-use or reusable tubing
- **VACUUM LEVEL RANGE**  
Programmable from 5 to 500mmHg (step 5mmHg)
- **FLOW RATE RANGE**  
Programmable from 2 to 50cc/min (step 2cc/min)
- **RISE TIME (IN U/S MODE)**  
25 levels, programmable from 2 to 50cc/min (step 2cc/min)
- **CONTROL**  
Panel or Linear vacuum and flow control by the footpedal
- **SAFETY SYSTEM**  
ACS3 (Anterior Chamber Surge Suppression System)

### ANTERIOR VITRECTOMY

- **CUTTER TYPE**  
20G pneumatic guillotine cutter
- **CUTTING RATE RANGE**  
Single or repetitive cut from 60 up to 700 cut/min
- **CUTTERS**  
Reusable guillotine cutter, adjustable port from 0.2mm up to 0.7mm  
Single use guillotine cutter
- **ACTUATING MEDIUM**  
Pressurized air from integrated air compressor
- **SPECIAL FEATURES**  
Open tip / Closed tip position
- **CONTROL**  
Panel or Linear cut rate control by the footpedal

### DIATHERMY

- **TYPE**  
Bipolar diathermy, 7W @450 Ohm
- **PROBES**  
Forceps and pencil eraser surface probes, endo-ocular pencil probes
- **CONTROL**  
Panel or Linear power control by the footpedal

### PHACOEMULSIFICATION

- **OPERATING FREQUENCY**  
40KHz
- **MAXIMUM STROKE**  
Up to 100µm, with *Minimal Stress* control (patented)
- **OPERATING MODES**  
Continuous, Pulsed from 1 to 40 Hz, Single Burst, Multiple Burst, Continuous Burst
- **POWER REDUCTION MODES**  
Power Limit and Auto Pulsed
- **HANDPIECES**  
Slim 4 piezoelectric handpiece (four crystals, titanium ultralight 40gr)  
Single use two crystals handpiece, including U/S tip, sleeve and test chamber
- **TIP AND SLEEVE RANGE**  
For coaxial phaco, Co-MICS, mics (incision size range from 1.0mm up to 3.2mm)
- **CONTROL**  
Panel or Linear stroke control by the footpedal

### TECHNICAL SPECIFICATIONS

- **INPUT VOLTAGE**  
100/120/220/230-240V (A.C.) selected
- **FREQUENCY**  
50/60Hz
- **POWER CONSUMPTION**  
90VA (Standard), 150VA (Peak)

### REGULATORY

- **CE MARKING**  
European directive 93/42/EEC
- **SAFETY**  
Conforms to IEC 60601-1  
IEC 60601-1-2  
IEC 60601-2-2  
IEC 60601-1-1

■ **OPTIKON 2000 S.p.a.**

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