

# Qubic Stim

Simplicity of design. Ease of use.



## Product Highlights

- **Simplicity of design for seamless integration**  
Full flexibility in set-up, lightweight device with small footprint, compatible with all lab systems
- **Ease of use for intuitive control**  
Established layout, optimal combination of touchscreen and hard key control, personalized protocols
- **Pioneer in cardiac stimulation**  
Market leading position with 30 years of experience, focus on essential features from previous generations, history of quality manufacturing

## Ordering Information

Model	Length	Order number
Qubic Stim - EP Heart Stimulator:		396165
Control Unit		
Stim. Unit		
VK-118	0.5 m	
PK-128	2.8 m	
Power cord		

Model	Length	Order number
Optional Accessories:		
VK-118	0.5 m	399466
VK-118	5.0 m	399467
VK-118	30.0 m	399468
PK-128	2.8 m	339818
Sterile Cover Hood	ø 85	123399

# Qubic Stim

## Technical Data

### Physical characteristics of Control Unit

Category	Design
Dimensions (W x H x D)	220 x 78 x 218 mm
Weight	1.1 kg ( $\pm$ 100 g)
Housing material	Polystyrene

### Physical properties of Stim Unit

Category	Design
Dimensions (W x H x D)	228 x 61 x 234 mm
Weight	1.1 kg ( $\pm$ 100 g)
Housing material	Polystyrene

### General classification

Category	Design
Class of medical product	Class IIb in compliance with Directive 93/42/EEC (MDD)
Mode of operation	Continuous operation

### Longevity

Category	Design
Longevity	5 years

### Ambient conditions

Category	Design
Temperature range for operation	+ 10°C ... + 40°C
Temperature range for storage	0°C ... + 50°C
Relative humidity	30% ... 75%, no condensation
Atmospheric pressure	700 ... 1060 hPa
Operation at altitudes	Up to 3000 m

### Screen

Category	Design
Size	7" (17.8 cm)
Resolution	800 x 480 SVGA
Touch screen	Resistive

### Safety features

Category	Design
Applied part classification	CF, defibrillation protected with PK-128
Degree of protection	IP 30

### Stim Unit connector ports

Category	Design
Ethernet port	2 ports each for connecting the Control Units to the Stim Unit via the VK-118 ethernet cable
Patient cable connector port	2x Redel ports, 6-pin for PK-128

### Control Unit connector ports

Category	Design
Ethernet port	Port for connecting the Control Units to the Stim Unit via the VK-118 ethernet cable
USB connector port	USB 2.0 standard (12 Mbit/s) for USB sticks without independent power supply
HDMI connector port	HDMI port, type A for devices that comply with IEC standards 60901-1, 3rd Ed., or IEC 60950

### Power cord port

Category	Design
Supply voltage	100 – 240 V, $\pm$ 10% 50 / 60 Hz, $\pm$ 1 Hz max. 0.6 A - 0.3 A / AC
Protection class	I
Fuse type	T 3.15 AH, 250 V
Max. power input	Duration 30 W Peak 40 W
Level of efficiency	> 75% [at 230 V/50 Hz]
On/off light indicator	Green LED, lit continuously

## Parameter Values

### Parameters for all pacing modes

Parameter	Factory setting	Range of values	Step size
Spontaneous interval [display of measured intrinsic event]	–	150 – 4000 ms [ $\pm$ 10%]	1
Amplitude	5 V	0.1 – 10 V [ $\pm$ 15% or $\pm$ 0.1 V] at impedance > 100 ohm	0.1
Pulse width	1 ms	0.1 – 2.0 ms [ $\pm$ 10% or $\pm$ 0.1 ms]	0.1
Sensitivity	1 mV	1 – 20 mV [ $\pm$ 10% or $\pm$ 0.2 mV]	0.1
Stimulation channel	1	1 – 3	1

### Parameters for the pacing mode programmed extra stimulus (PES)

Parameter	Factory setting	Range of values	Step size
Refractory period	180 ms	130 – 600 ms [ $\pm$ 10%]	5
Threshold value [limit for step size change above and below]	200 ms	200 – 600 ms	10
Step size below the threshold value	10 ms	5 – 100 ms	5
Step size above the threshold value	20 ms	5 – 100 ms	5
Pacing mode	Fixed	Fixed, Inhibited, Sensed	–
Basic interval S1-S1	500 ms	100 – 3000 ms [ $\pm$ 10%]	10
PES interval S1-S2	490 ms	20 – 3000 ms [ $\pm$ 10%]	10
PES interval S2-S3	350 ms	20 – 1500 ms [ $\pm$ 10%]	10
PES interval S3-S4	350 ms	20 – 1500 ms [ $\pm$ 10%]	10
PES interval S4-S5	350 ms	20 – 1500 ms [ $\pm$ 10%]	10
Pause between stimulation sequences	2 s	0 – 59 s [ $\pm$ 5% or $\pm$ 500 ms]	1
Number of pacing cycles for S1-S1	1	0 – 99	1
Automatic incrementing or decrementing	Decrementing [Dec]	Incrementing [Inc], decrementing [Dec]	–
Minimum PES interval	150 ms	20 – 220 ms	10
In-channel blanking	125 ms [ $\pm$ 5 ms]	–	–

### Parameters for pacing mode high rate stimulation

Parameter	Factory setting	Range of values	Step size
High rate pacing rate	250 bpm	1200 – 55 bpm / 50 – 1090 ms [ $\pm$ 10%]	10

### Parameters for pacing mode SNRT (sinus node recovery time)

Parameter	Factory setting	Range of values	Step size
Basic interval S1-S1	500 ms / 120 bpm	100 – 3000 ms / 600 – 20 bpm [ $\pm$ 10%]	10
Stimulation duration	30 s	10 – 120 s [ $\pm$ 5%]	1
Measurement period after pacing	30 s [ $\pm$ 5%]	–	–
Spontaneous interval [SPI 1]	–	130 – 30000 ms [ $\pm$ 10%]	–
Corrected sinus node recovery time (cSNRT)	–	130 – 30000 ms [ $\pm$ 10%]	–
In-channel blanking	125 ms [ $\pm$ 5 ms]	–	–

### Parameters for the settings

Parameter	Factory setting	Range of values	Step size
Screen brightness	60%	20 – 100%	10
Acoustic signals	On	On, Off	–
Volume for acoustic signals	50%	0 – 100%	10
Language selection	English	English, Español, Français, Italiano, Deutsch	–