

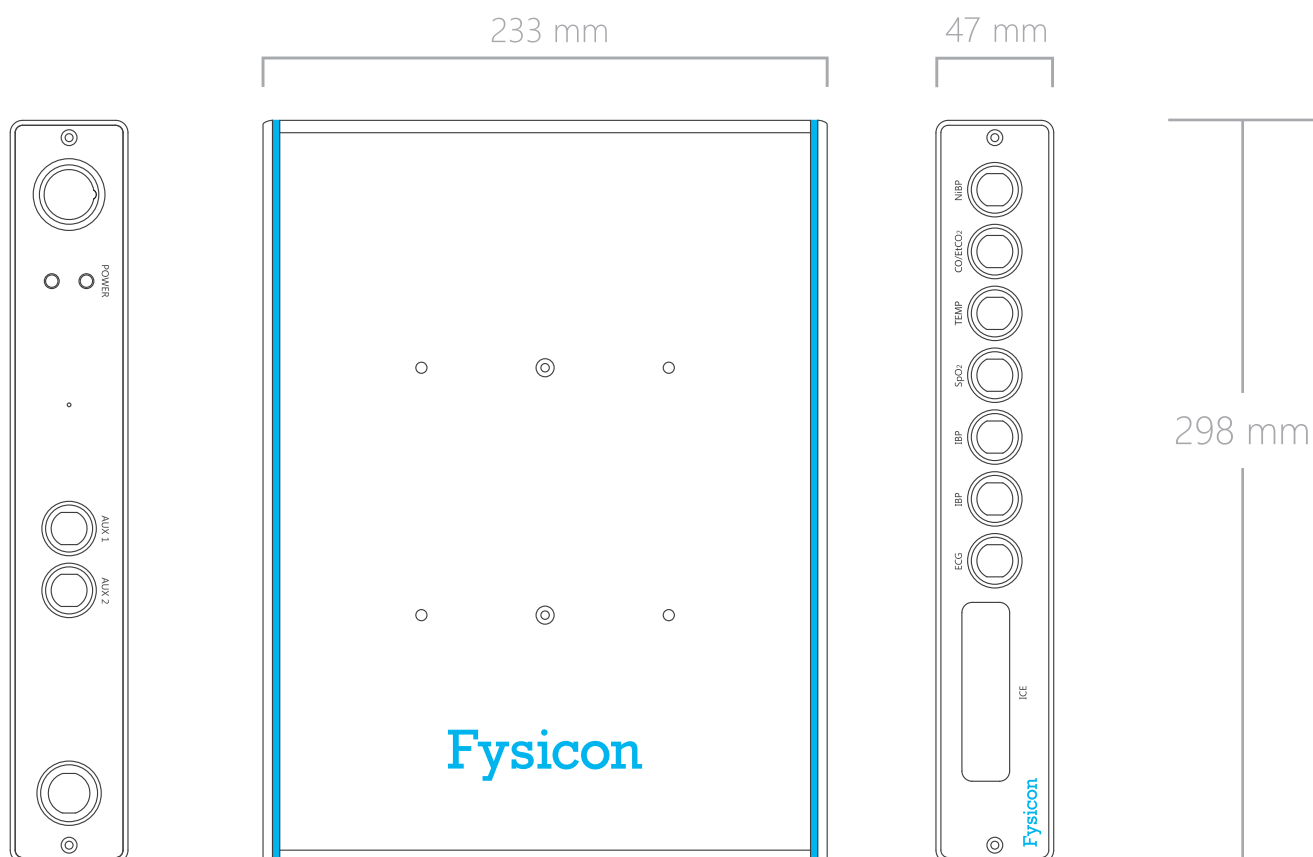
# Fysicon QMAPP®

## Technical specifications of the QMAPP amplifier

Dimensions:	298 x 233 x 47 mm (L x W x H)
Weight:	2200 Gram
Power:	24 VDC
Power Supply:	90 - 240 VAC $\pm$ 10% to 24 VDC, 2.5 A
Power Consumption:	max. 60 Watt
IP Class:	IP42
Defibrillation Protection:	Yes
Operating Temperature:	10° - 40° C / 50° - 104° F
Relative Humidity:	< 85% (non-condensing)
Safety Class:	IIb
Safety Requirements:	IEC 60601-1, 3rd Edition

### Storage conditions

Temperature:	-20° - 40° C / -4° - 104° F
Relative Humidity:	$\leq$ 80% (non condensing)



Hooghevelstraat 114  
5349 BA Oss - NL



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



[info@fysicon.com](mailto:info@fysicon.com)



+31 (0)412 65 33 33

# Technical specifications of the QMAPP modules

## Surface ECG

Channels:	12
Leads:	I, II, III, aVR aVL, aVF, C1 - C6
Sensitivity:	1, 2 or 3
Sampling frequency:	2 - 32 KHz
Input impedance:	> 2.5 MΩ
CMMR:	> 100 dB
Heart Rate measuring range:	15 - 300 bpm
Accuracy Heart Rate:	2%
Lead Off detection:	Yes

## Respiration Effort

Channels:	1
Measuring method:	Impedance
Sensing electrodes:	RA-LA and RA-LL
Sampling frequency:	50 Hz - 2 KHz
Parameters:	Respiration Rate
Respiration effort rate:	0 - 150 breaths/min

## Invasive Blood pressure (IBP)

Channels:	Up to 4
Measuring method:	Pressure Transducer
Sampling frequency:	100 Hz
Sensitivity:	5.0 μV/V/mmHg
Accuracy:	±1 mmHg
Parameters:	SYS, DIA, MEAN
IBP measuring range:	-30 - 320 mmHg

## Oxygen Saturation (SpO<sub>2</sub>)

Channels:	1
Measuring method:	Nellcor Oximax™
Measuring range:	70 - 100%
Parameters:	% Oxygen Saturation & Pulse Rate
Sampling frequency:	75 Hz
Accuracy:	±3% (70-100%)
Pulse Rate measuring range:	20 - 300 bpm
Accuracy:	±3 bpm (20 - 250 bpm)

## Skin Temperature (TEMP)

Channels:	2
Measuring method:	Thermistor probe
Sampling frequency:	1 Hz
Parameters:	Temperature
Measuring range:	20° - 45° C / 68° - 113° F
Resolution:	0.1° C / 0.18° F
Accuracy:	0.1° C / 0.18° F

## Cardiac Output (CO)

Channels:	1
Measuring method:	Thermodilution
Sampling frequency:	10 Hz
Measuring range:	0.1 - 20 L
Accuracy:	±0,1 L
T Measuring range:	30° - 42° C / 86° - 107° F (Blood) 0° - 26° C / 32° - 78° F (Injectate)

## End-tidal CO<sub>2</sub> (EtCO<sub>2</sub>)

Channels:	1
Measuring method:	C300 (NDIR), Sidestream
Sampling frequency:	10 Hz
Measuring range:	0 - 150 mmHg, 0 - 19.7%
Resolution:	0.1 mmHg (0 - 49 mmHg) 0.2 mmHg (50 - 150 mmHg)
Accuracy:	±2 mmHg (0 - 40 mmHg) ±5% mmHg (41 - 70 mmHg) ±8% mmHg (71 - 100 mmHg) ±10% mmHg (101 - 150 mmHg) above HR of 80 BPM ±12%
Compensation (automatically):	Barometric pres. 400-800 mmHg

## Non-invasive Blood pressure (NiBP)

Channels:	1
Measuring method:	CAS MAX, Oscillometric
Measuring range:	15 - 260 mmHg
Measuring mode:	Manual, Auto or STAT
Accuracy:	±5 mmHg
Parameters:	SYS, DIA, MEAN

## Intra Cardiac ECG (ICE)

Channels:	Up to 32 bipolar (64 inputs)
Sampling:	2 - 32 KHz
CMMR:	> 100 dB
Resolution:	24 Bits
Sensitivity:	1, 2 or 3
Heart Rate measuring range:	15 - 300 bpm
Lead Off detection:	Yes
IC Reference potential:	WCT or input
Notch Filter:	50 Hz, 18 dB/oct 60 Hz, 18 dB/oct
Hi-Pass Filter:	200 Hz -3 dB, 18 dB/oct 400 Hz -3 dB, 16 dB/oct
Low-Pass Filter:	0.05 Hz, 6 dB/oct 0.2 Hz, 6 dB/oct 40 Hz, 6 dB/oct 80 Hz, 6 dB/oct
Presets:	A-H, H-V, A-V, HRA and SC
Auto triggering:	Yes
Full Disclosure:	Yes, incl. screenshot

## Auxiliary Output

Ports:	2
Channels:	4
AUX 1:	Digital output channel TTL Pulse Based on QRS Amplitude TTL: <5V Output drive: ≥5mA
AUX 2, 3, 4:	Analog output channel Amplitude: 0.1Vmax (Gain 2-16x) Resolution: 10 bits Accuracy: 2 bits Output drive: ≥5mA