Dual Channel Isolation Amplifier 95-0450-006-1

The TMSi isolation amplifier is intended to provide a patient safe galvanic isolation between two external analog inputs and two AUX ports on TMSi signal acquisition devices.

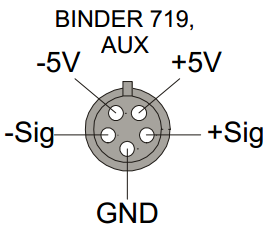
NOTE: Keep all patient-unsafe connections outside the patient environment, i.e. 1.5m from the patient.

The package set contains a dual channel isolation amplifier as well as two AUX cables and this specifications sheet.

Physical Dimensions	
Size	105mm x 50mm x 25mm
Weight	75 gram
Material	ABS (grey)

Electrical Properties	
Isolation breakdown voltage	1500V AC
Gain	0.5 (-3dB)
Input Voltage range	-4.45..4.45V
Maximum Allowed Input Voltage	-4.90..4.90V
Leakage current	<8µA over breakdown range
Bandwidth	0-900Hz (single pole -3dB)
Input Impedance	10GΩ // 5pF
Input referred Noise (RMS)	0.2mV
Cross-talk	-60dB@50Hz
Offset	maximum ±50mV, typical ±20mV
Power consumption	300mW
Input Connectors	2x BNC (center pin = +)
Output Connectors	2 x 5-pin Binder 719 (see pinout)

Pinout



Front-outside view, female connector

Maintenance

- Before cleaning make sure equipment is turned off and not in contact with a patient.
- Use a slightly damp cloth for cleaning.
- Never use aggressive chemicals for cleaning.
- Only use water or isopropyl alcohol for cleaning.
- Do not sterilize equipment.

Notes

- You need two AUX ports on your TMSi signal acquisition device to connect both external inputs.
- When connecting only a single channel the power consumption will be the same as with both channels connected (300mW).
- The power consumption is beyond the advised maximum rating of TMSi AUX ports, which is 50mW per channel. As a rule of thumb it is possible to use a maximum total of only two Isolation Amplifiers on Refa and Porti devices when no other power draining accessories are connected.
- With any question regarding this product or this datasheet please contact support@tmsi.com.

Standards

European Communities Council Directive 93/42/EEC
as amended by Directive 2007/47/EC
Concerning Medical Devices

DECLARATION of CONFORMITY

Type:
ISO module

Directive Classification:
I

Manufacturer:
TMS International BV
Zutphenstraat 57
7575 EJ OLDENZAAL
The Netherlands

Conforming to Standards:

IEC 60601-1:2005	'Medical electrical equipment - Part 1: General requirements for basic safety and essential performance'
IEC 60601-1-2:2007	'Medical electrical equipment - Part 1-2: Electromagnetic compatibility Requirements and tests'

The undersigned declares that the products as specified above comply with the Essential Requirements of Annex I of the Medical Device Directive 93/42/EEC as amended by Directive 2007/47/EC.

Signed:

Jan Peuscher, CTO, TMSi

Date:
26 Aug 2013

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