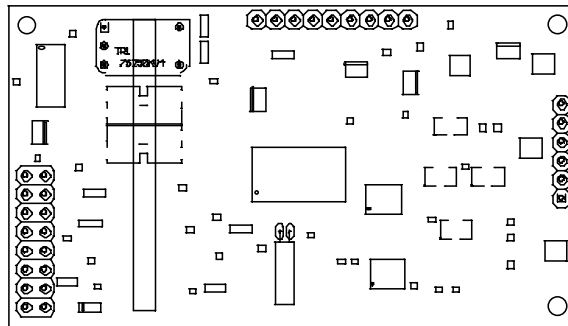




Two Channel Temperature OEM board

EG 00700

Technical Manual



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Introduction

The EG00700 eases the task of integrating a medical temperature monitoring system into an existing or newly developed medical monitor.

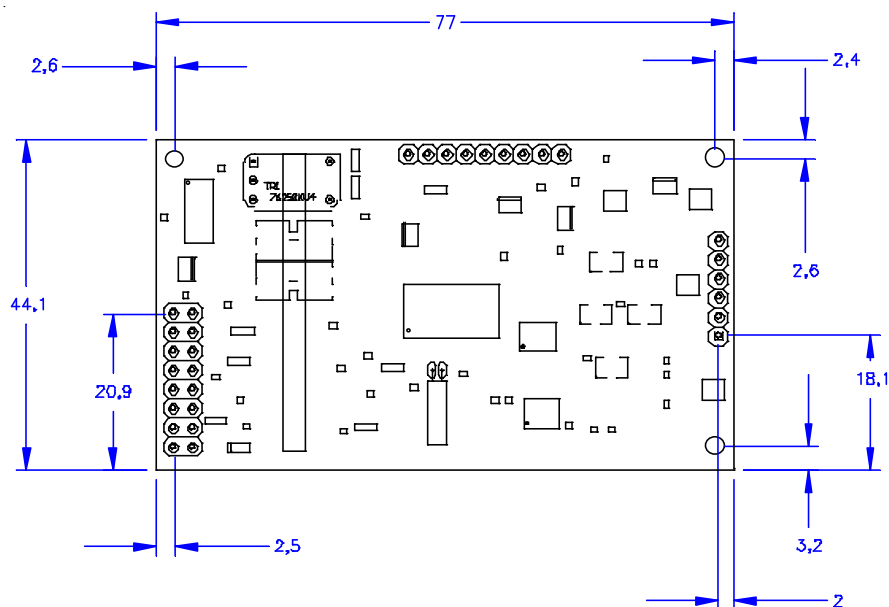
The module is fully compatible with all YSI 400 standard temperature probes.

These probes are a de-facto standard in most hospitals and medical applications worldwide.

The patient side of the module is fully isolated from the rest of the module, the system includes also the DC/DC conversion for this isolated side. The leakage currents of the board itself are low enough to meet class CF regulations of the IEC 601. The insulation withstands voltages as high as 4000 Volt RMS.

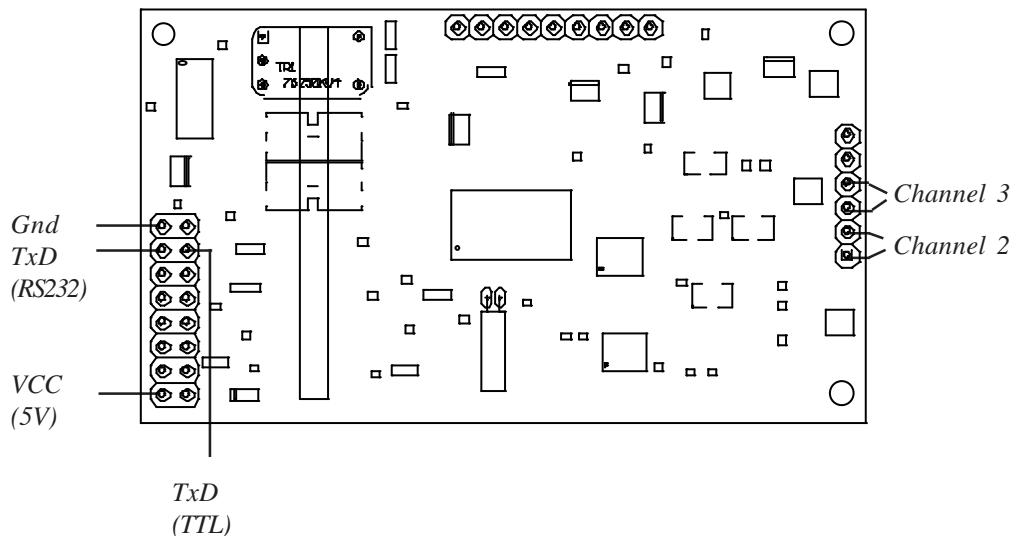
The inputs of the module are shielded against high voltage transients that can be present at the module during some EMC checks and while applying defibrillation pulses to the patient that are capacitively coupled to the temperature probe cable.

The module has two inputs as well as a reference input, that always reads as 38.8 °C. This channel can be used as a functional control of the whole system.



not to scale

Mechanical Dimensions, all values in mm



Connection to the host system and to the sensors

Technical Data

- Temperature OEM Module for medical purposes
- Compatible with all YSI Series 400 Probes
- Accuracy: $\pm 0.1\text{ }^{\circ}\text{C}$ for an ambient Temperature of $10\text{ }^{\circ}\text{C}$ to $40\text{ }^{\circ}\text{C}$
- Measurement range: $20.0\text{ }^{\circ}\text{C}$.. $44.0\text{ }^{\circ}\text{C}$
- Low Powered, Isolated Module with digital, serial RS232 Interface
- Interface has both TTL and RS232 Levels
- 4000 Volt RMS Isolation of Patient side (CF Type)
- Warm up time less than 30 seconds
- 2 Temperature Channels, 1 Reference channel ($38.8\text{ }^{\circ}\text{C}$)
- ASCII Type output, visible on each terminal
- Small size: PCB $77\text{ mm} \times 44\text{ mm} \times 10\text{ mm}$
- Low Power: less than 10 mA @ 5 Volts
- Integrated selftest

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