

Medical



Elma Electronic

05|2021

Fields of medicine

Types of application

ELMA
Your Solution Partner

Elma offers a wide range of solutions that can serve many applications. Our products and solutions are used in the following fields:



Medical technology

Combining technical knowledge with the expertise of medical professionals requires reliable systems.



Test, inspection and measurement

Precise tests and inspections require reliable devices - and this is exactly what Elma Electronic delivers to its customers.



Respiratory or rehabilitation equipment

Decisions must often be made very fast, which requires intuitive operating elements such as HMI front panels / touch screens or self-explanatory devices.

Fields of medicine

Types of application



ECG

ECG devices vary by use, but in all situations the enclosure must be stable and, in some cases, vibration-proof.



Roentgen

As a modern part of medicine, X-ray machines have become indispensable. Elma offers customized enclosures for this.



Diagnostics and analysis

In order to enable the most common laboratory parameters to be determined quickly, recognized and safe equipment is essential.



Patient monitoring

Monitoring must be automatic and ongoing without interruptions – a reliable power supply can insure this.



Dental technology | Dental medicine

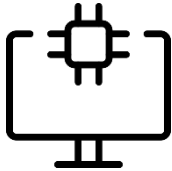
This often requires complicated micro movements, which impacts the precision of the instruments, that need to be extremely precise.

Our strengths in the medical sector

- Years of experience in the medical field
- Custom solutions
- Engineering, validation and certification
- Production, assembly and delivery
- Large range of products: System solutions, power supplies, enclosures and rotary switches from a single source
- Sustainable relationships with suppliers and customers
- Global presence

Products

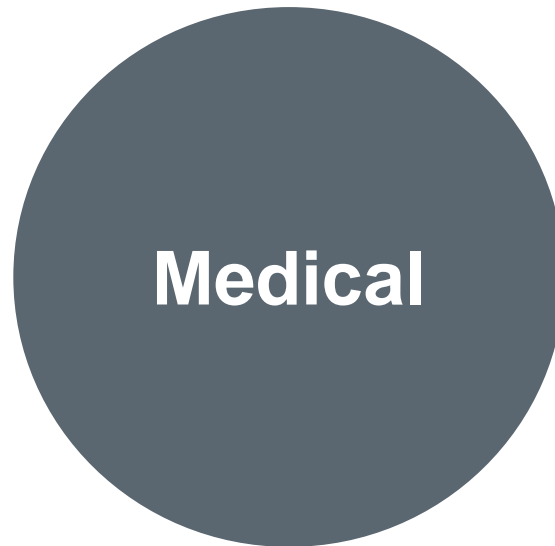
Products for the medical sector



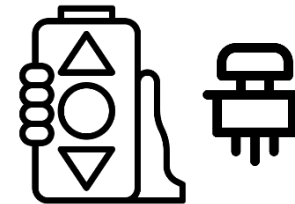
System solutions



Power supplies



**Enclosures and
components**



Rotary switches

Power supplies

Products for the medical market

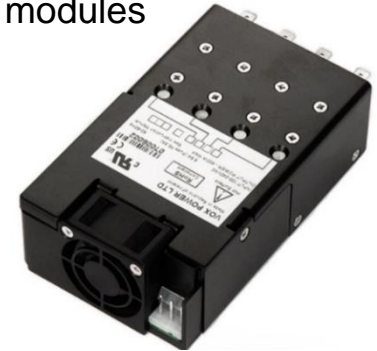
Converter

Power density
Reliability (MTBF)
EMC requirement
Class I and Class II
MOOP - Means of Operator Protection
MOPP - Means of Patient Protection
ISO13485 (quality requirements)
IEC / EN60601 (safety requirements)



AC/DC converter

Fully modular power supply with 4 | 8
Individual or combinable output modules
90 to 264 VAC
Nevo +600M
Nevo +1200M



DC/DC converter

3.5 W in DIP24 SMD case
2 MOPP
6kVDC / 1s isolation
> 8 mm creepage and clearance
-40 to +85 °C no derating
EN60601-1-2 medical certification

DC/DC converter

From 0.25 to 30 W
SMD, THT
Galvanically isolated
2 MOPP
Medical safety EN60601 3rd edition
Medical EMV EN60601 4th edition

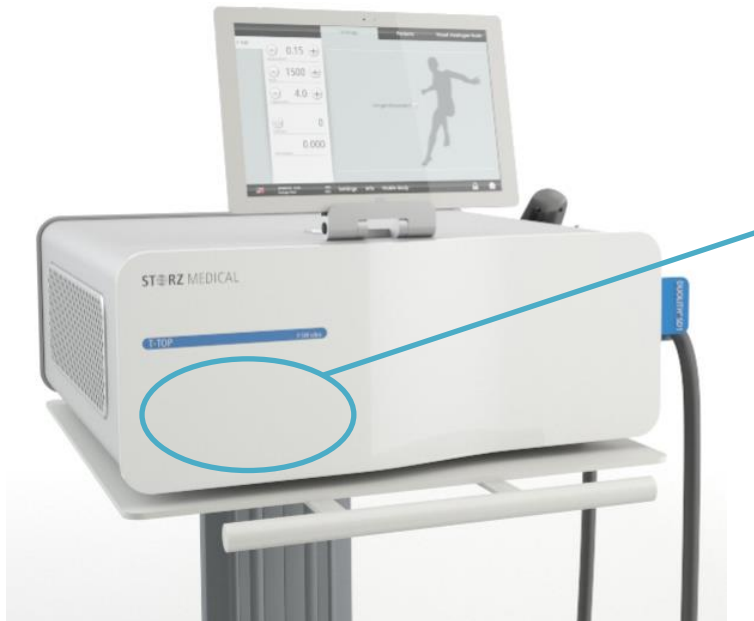


Power supplies

Application examples in the medical sector

Laser treatment

Provided with a versatile modular power supply that is compact and works with high reliability. Up to 4 individually adjustable output voltages are possible with one power supply unit. It also has full medical approval according to EN60601-1.



Ultrasound therapy

Versatile modular power supply for high power density and variable voltages. Meets EN60601-1 for security and isolation.

System solutions

Products for the medical market



Medical Panel Computer

Intel iCore and Celeron processor family
Screen high resolution up to Ultra HD
Screen sizes from 10.1 to 27 inches
Multi-touch in PCAP technology



Medical Tablet

Screen 10.1
Widescreen high resolution WXGA
Multi-touch in PCAP technology
Intel Bay Trail-M processor
Connection options for peripherals
Data transfer via WLAN and Bluetooth
Data acquisition via RFID and cameras



Medical Monitor

Screen high resolution up to Ultra HD
Screen sizes from 21.5 to 32 inches

System solutions

Application examples in the medical sector



Ultrasound therapy

Central computer with Intel iCore processor
High computing power for ultrasound image processing
Low energy consumption

Liquid Handling

Central control unit Box-PC
with customer-specific adaptations and a custom display



Rotary switches and encoder

Products for the medical market

ELMA
Your Solution Partner



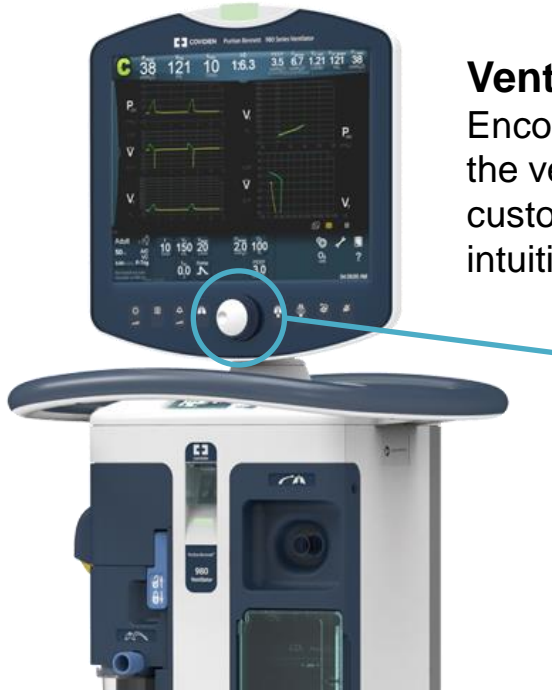
Encoder

1. E18 or E33 for menu choice including push function in various configurations
2. E33 with Interface solutions for easy assembly
3. E37 with two shafts for narrow space demand
4. Encoder with Hall-Sensor technology
5. Various knobs in aluminum or plastic in different colors



Encoder E33

Application examples in the medical sector



Ventilator

Encoder adapts the main controls of the ventilation menu with a highly customizable display including intuitive screen navigation.



VENTIlogic LS Ventilator

The device has unique smart functions such as LIAM (Lung Insufflation Assist Maneuver) to support the cough or to relieve the breathing pump. Incremental encoder with SMT is used for pick-and-play PCB assembly with a high volume and standard brass shaft.



Ventilator

Incremental encoder with IP68 front panel protection and stainless steel shaft, is suitable for various environments and offers reliability and quality for a long service life.

Encoder E33

Application examples in the medical sector



Corpuls 3 Defibrillator

Encoder enables very easy access and contact between medical professionals and patients through the effortless and understandable menu function on the monitor.



Milli-Q water purification system

Encoder is in the gun to regulate the water flow. The selected value is checked with the push button.



Enclosures and components

Products for the medical market

ELMA
Your Solution Partner



iD-Box 16

High-quality enclosure with EMC protection, easy-care surface and customer-specific dimensions.

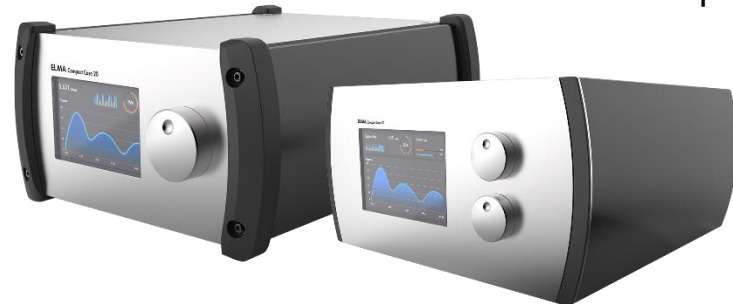


iD-Case 18

High-quality metal enclosure in four different sizes, stackable, easy-care surface and with EMC protection.

Compact Case 20

Enclosure in many variations, all-round anodized aluminum, optional EMC protection, stackable and available rugged version.



Front panel center
Customizable front panel made of aluminum or plastic thanks to various printing processes.



Enclosures and components

Application examples in the medical sector

ELMA
Your Solution Partner

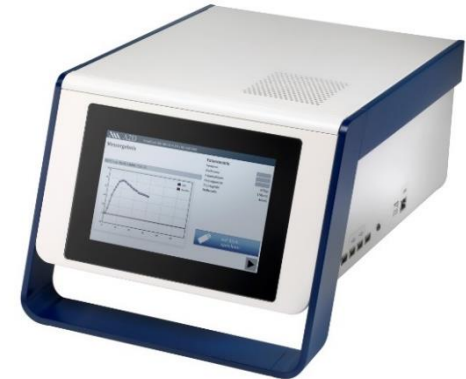


Swisstrace

MR compatible blood collection system. Customer-specific solution based on the iD-Case 18.

Argos Med

Enclosure for medical measuring instrument. Customer-specific solution based on the iD-Box 16.



QuintStation 525

Information therapy - test and measurement device for holopathy. Customer-specific enclosure based on the iD-Box 16.

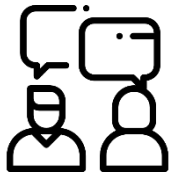


Services

Service before, during and after the project

Your requirement is our challenge. We use our experience and know-how to efficiently lead your project to success. But even after the project, Elma continues to serve you.

Our services for you



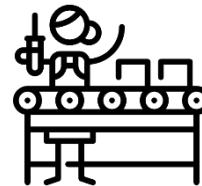
Request

Contact us and tell us your request.



Solution

We would be happy to work out a solution with you and make you an offer.



Assembly

We advise you individually and produce your desired product made to measure.



Service

We not only deliver on the requested date, but also continue to offer you our services.

Associations and standards

Industry associations

Elma is a member of these industry associations and standards

- **IQ Net:** The IQNet certificates are used by companies and organizations worldwide to confirm that they are certified according to a certain standard
- **ISO9001:** Continuous optimization of the company's own quality management system
- **ISO 14001:** Environmental management systems that improve environmental performance
- **RoHS and REACH:** Declaration of conformity
- **Environmental protection:** Voluntary climate protection and energy efficiency
- **Declaration** «conflict raw materials»
- **Declaration** «counterfeit materials»

Contact

ELMA
Your Solution Partner

www.elma.com

