

# 04/19

## Issue Preview

elektronik journal special issue “Medical Electronics”  
in May:

- Components
- Systems
- Power supply
- Sensors
- Security

Hüthig Elektronik Medien Gruppe

Advertising deadline:  
April 11, 2019

Publication date:  
May 9, 2019



# EDITORIAL PREVIEW

## Components

### Health Sensor Platform for professional wearables

For faster prototyping of designs for health wearables, developers are able to make use of development platforms in which various components are integrated. One example of this is the Health Sensor Platform 2.0 – the first highly energy-saving platform for monitoring ECG, heart rate and temperature which is worn on the wrist. The open platform contains various sensors, microcontrollers and power management etc. in order to develop wearables suitable for use in professional medical applications.

### EMC in medical technology

In order to ensure the devices function continuously, developers have to observe various norms and medical standards relating to EMC. In addition, filters for use in medical applications have to be designed in such a way that the end product meets MOPP (Means of Patient Protection) and MOOP (Means of Operator Protection) requirements. How can this be implemented?

### Medical-appropriate heat dissipation

Due to the rigorous requirements that apply to electronic medical devices, the problem of heat dissipation is far from trivial but can be solved with the right solution.

## Systems

### Networked hospitals

The healthcare market is undergoing constant change, strongly driven by the Internet of Things with its focus on connectivity, security, scalability and sustainability. From IoT end devices and infrastructure systems to data capture and beyond – modern IoT-supported medical treatment enables smart real-time applications that are capable of enhancing treatment quality as well as significantly reducing the healthcare costs.

## Power supply

### Power for a renal denervation system

When redesigning a renal denervation system, a technical process was to be used which involves several interconnected electrodes being attached to nerve ends simultaneously and systematically giving off high-frequency energy (HF). This enabled the duration of the operation to be reduced from 24 to four minutes, though the requirements in terms of the power supply were very demanding.

### Energy for medical technology

Power supplies for use in medical technology are subject to particularly rigorous requirements. This article examines the key factors and presents a concrete solution.



### Safety through the use of a DC/DC converter

Electronic monitoring is increasingly used in professional nursing at home, too – whether monitoring vital signs in intensive care or using simple sensors to indicate bed occupation. Here, the power supply for the electronics requires secure galvanic isolation. This article explains why power insulation is required in typical situations, describes the safety standards to be applied and explains these based on examples.

## Sensors

### Flow sensor solutions in modern respirators

The key factor in all respirators is the precise measurement of breathing gas flow rate and volume. Patient-oriented respiration is only possible based on these measurements, taken with a high degree of sensitivity and precision. Monitoring pressure, mass flow and volume over time indicates changes in the patient's state, for example.

## Security

### Security and software licensing

Software is increasingly defining the functions of medical devices. When individual software functions are activated, these can be subsequently configured in the device as an after-sales service. A suitable (cyber) security solution is required for this purpose, however.



# EDITORIAL PREVIEW



## Advertising formats

	Width x height	Basic price b/w	4c
1/1 page	178 mm x 257 mm	€ 3,480.00	€ 4,555.00
1/2 page	86 mm x 257 mm /178 mm x 126 mm	€ 1,920.00	€ 2,765.00
1/3 page	56 mm x 257 mm /178 mm x 83 mm	€ 1,195.00	€ 2,040.00
1/4 page	41 mm x 257 mm /178 mm x 62 mm	€ 880.00	€ 1,480.00

For further information, please request our complete media data. Or simply click

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

## Contact Persons

**Advertising manager:**  
Frank Henning  
Tel. +49 6221 489-363  
[frank.henning@huethig.de](mailto:frank.henning@huethig.de)

## Publishers

Hüthig GmbH  
Im Weiher 10  
D-69121 Heidelberg  
Tel. +49 6221 489-232  
Fax +49 6221 489-482  
[www.all-electronics.de](http://www.all-electronics.de)

## Sales Force

**Austria, Great Britain, Ireland, USA, Canada**  
Marion Taylor-Hauser  
Max-Böhm-Ring 3  
**D-95488 Eckersdorf**  
Tel. +49 921 31663  
Fax +49 921 32875  
[taylor.m@t-online.de](mailto:taylor.m@t-online.de)

## Switzerland, Liechtenstein

Katja Hammelbeck  
Ermatinger Str. 14  
**CH-8268 Salenstein**  
Tel. +41 71 55202-12  
Fax +41 71 55202-10  
[kh@interpress-media.ch](mailto:kh@interpress-media.ch)

## Order

Please call me

Please send me the media data for

- AUTOMOBIL-ELEKTRONIK
- elektronik industrie
- elektronik journal
- productronic
- all-electronics.de

We are interested in an advertisement

- 1/1 page
- 1/2 page
- 1/3 page
- 1/4 page

## Fax service +49 6221 489-482

\_\_\_\_\_  
Last name, first name

\_\_\_\_\_  
Company

\_\_\_\_\_  
Department

\_\_\_\_\_  
Street/post office box

\_\_\_\_\_  
Postal code/City or town

\_\_\_\_\_  
Phone

\_\_\_\_\_  
E-Mail