



# ISOBE5600

Optimize your data security ...

... in high-voltage measurement applications



- \_\_\_ 100% secure measurement data and operator safety
- \_\_\_ Maximum measurement accuracy
- \_\_\_ Integrated fiber-optic isolation



# Place your trust in ISOBE5600 ...

## ... the premier measurement system for high-

High-voltage measurements are time-consuming and cost-intensive. This is why security and efficiency were allocated highest priority in HBM's isolation test instrumentation. You can unreservedly place your trust in ISOBE5600 – the leading isolation system worldwide for precise transfer of your measurement signals to the data acquisition system.

### Principle of the ISOBE5600 system



### Application examples



# voltage applications

# ISOBE

- \_\_\_ Secure data transmission in high-voltage environments thanks to fiber-optic isolation
- \_\_\_ Worldwide use and proven a thousand times over – already in the 4th generation.
- \_\_\_ NEW: Cost-efficient transient recorder for applications with low channel counts.  
Top-class measurement technology through optimal integration of hardware and software



Optical fiber



Receiver unit (with analog output or with memory)



More information: [www.hbm.com/isobe5600](http://www.hbm.com/isobe5600)



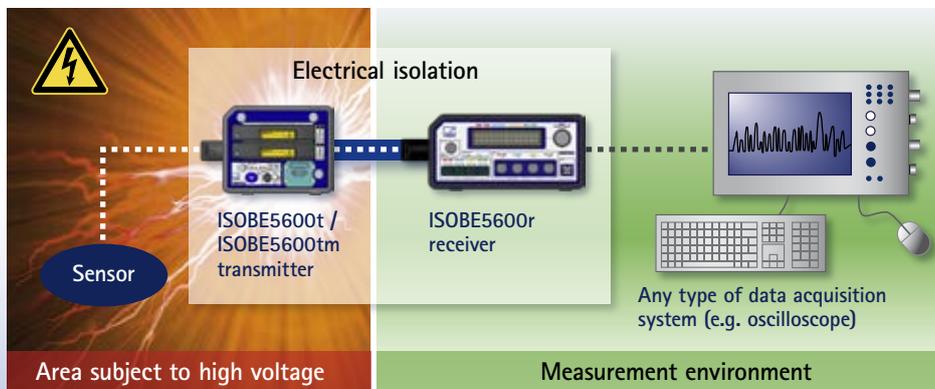
# The system for increased security

Do you want to securely perform tests in areas subject to high voltage and, at the same time, trust in highly precise measurement results? HBM's ISOBE5600 product family is the leading transmission system with integrated fiber-optic isolation worldwide. All product variants fully satisfy demands for security, a large bandwidth and measurement accuracy.

Be it measurements in research, product development or certification, testing of switching systems or high-voltage lightning impulse tests – ISOBE5600 is optimally suited for applications in areas subject to high voltage.

## ISOBE5600 isolation system

	Transmitter		Receiver
Measurement data transfer to any data acquisition system			
<b>Model</b>	<b>ISOBE5600t</b>	<b>ISOBE5600tm</b>	<b>ISOBE5600r</b>
<b>Description</b>	Rechargeable battery-powered transmitter	Mains-powered transmitter with isolated power supply (1.8 kV isolation)	Receiver with analog output
<b>Functions</b>	Potential-free measurements; the measuring probe is operated without connection to external potential (ground)	Potential-free measurements up to 1.8 kV; applications that require continuous measurement.	Conversion back into analog output signal
<b>Field of application</b>	Isolation system with analog input and output for multi-channel applications (also with over 4 channels). Connection to existing data acquisition systems. Typical applications: Monitoring, fault finding, research, product development		



Fiber-optic isolation enables the transmitter to securely send measurement data from the area subject to high voltage to the receiver.

### Secure data transfer thanks

Long signal leads can adversely affect the quality of measurement data, in particular in areas subject to electromagnetic fields. Transmission via optical fiber prevents this.

# ISOBE



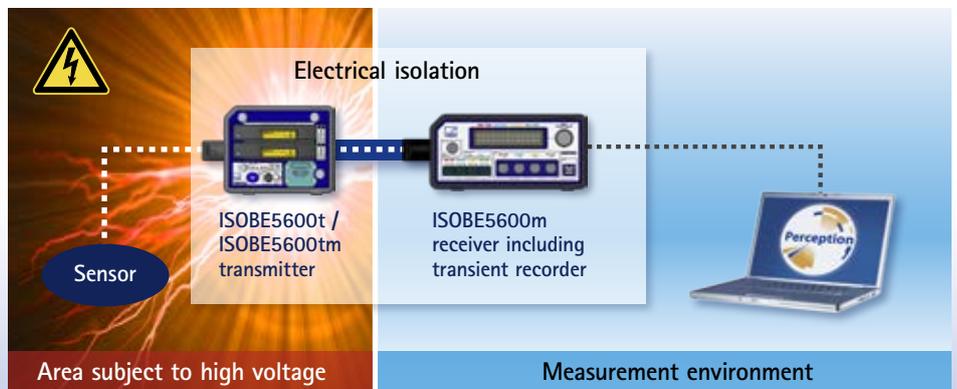
## ISOBE5600 transient recorder

	Transmitter		Receiver
Measurement data transfer, integrated transient recorder			
<b>Model</b>	ISOBE5600t	ISOBE5600tm	ISOBE5600m
<b>Description</b>	Rechargeable battery-powered transmitter	Mains-powered transmitter with isolated power supply (1.8 kV isolation)	Receiver with built-in memory for data acquisition
<b>Functions</b>	Potential-free measurements; the measuring probe is operated without connection to external potential (ground)	Potential-free measurements up to 1.8 kV; applications that do not permit replacement of the rechargeable battery.	Received data is buffered in the transient recorder and sent to the PC and Perception analysis software.
<b>Field of application</b>	Transient applications with 1 to 4 channels.		

### to electrical isolation

Electrical isolation, as implemented in ISOBE5600, ensures top-quality measurement data even in adverse conditions.

Control your measurements from a safe distance. Trust in accurate results – using HBM's ISOBE5600.

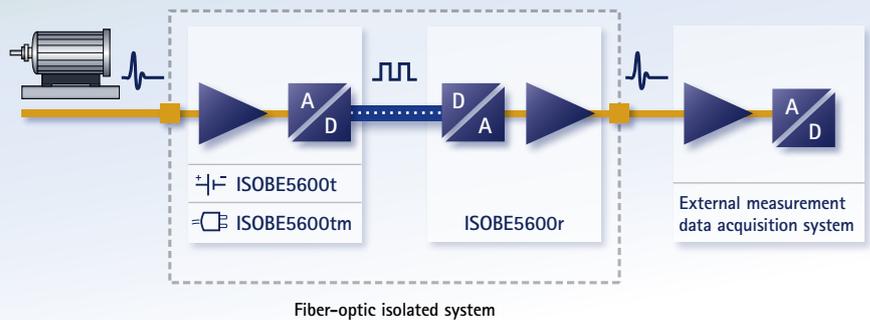


# ISOBE5600: The right solution for your application

Which system meets your requirements? The decision for the **ISOBE5600 isolation system** or the **ISOBE5600 transient recorder** depends on various factors. While the **ISOBE5600 isolation system** can be integrated into existing measurement systems, the **ISOBE5600 transient recorder** provides a complete measurement system. A rechargeable battery- or mains-operated transmitter is available for both systems.

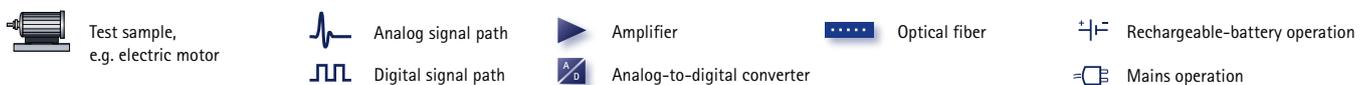
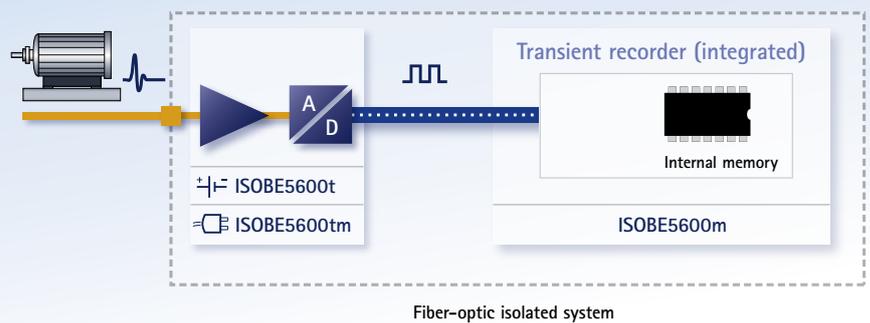
## ISOBE5600 isolation system ...

... offers secure isolation of existing measurement systems. Thanks to fiber-optic isolation even long signal leads do not adversely affect the quality of the test results. The ISOBE5600 isolation system ensures secure data transfer.



## ISOBE5600 transient recorder ...

... is a complete measurement system. The receiver with integrated memory guarantees maximum measurement accuracy through direct storage of digitally transmitted data.



# High performance under high voltage:

Professional software for your measurement data



## High voltage with Perception

Perception is the tried and tested, innovative, modular software package for high-speed measurement data acquisition. The Perception HV-IA (High Voltage Impulse Analysis) module has been developed especially for HV lightning and switching impulse tests and enables application-specific measurement data analysis to be performed. Without demanding special software knowledge from the user, the clear and intuitive user interface offers a maximum of analysis options.

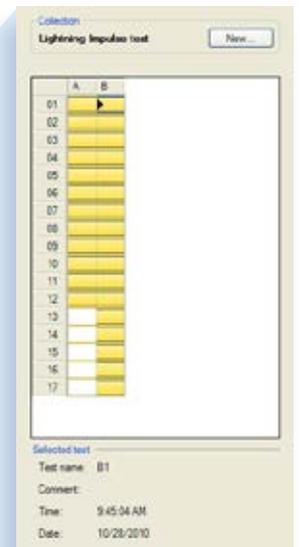
### 1 Easy to use

Perception HV-IA offers an application-specific control panel and thus makes setting up the system very easy.



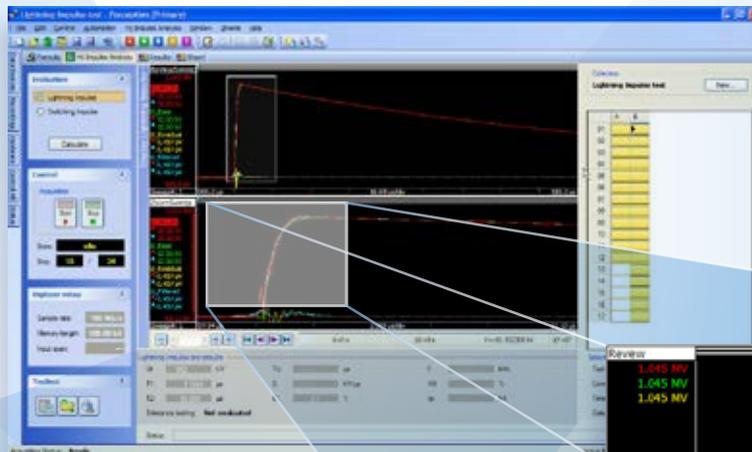
### 2 All measurements in a single file

Test samples with many terminals for example, transformers require extensive tests with multiple measurements per terminal. Perception HV-IA gathers and saves all measurements in a single file.



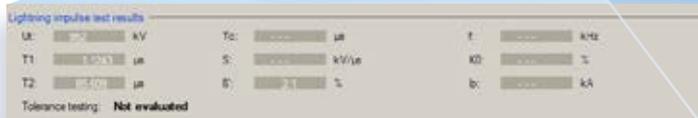
### 3 All the functions at a glance

HV-IA software (High Voltage Impulse Analysis) features a graphical user interface that clearly visualizes the major functions.



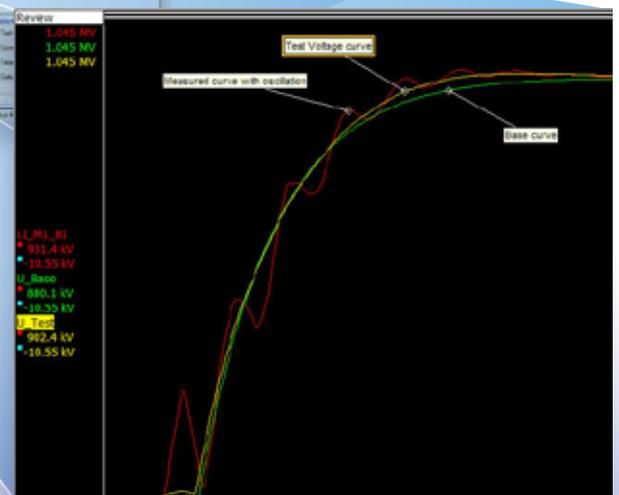
### 4 Fast visualization of results

Analysis results are automatically displayed after each test. This enables you to directly evaluate the quality of the test results and increase the daily number of test runs accordingly.



### 5 Graphical analysis using HV-IA

Perception HV-IA enables various curve types, e.g. when using the k-factor method, to be displayed for graphical analysis or hidden for standard tests.



## ISOBE5600 isolation system – the ISOBE5500 successor

The ISOBE5600 isolation system stands for secure measurement data transmission – already in the 4th generation! Fully digital data transfer, improved battery technology and a wider range of transmitter units further increase the system's ease of use. A worthy ISOBE5500 successor... you can rely on that.



## ISOBE5600 transient recorder – the SIGMA100HV successor

Are you using a SIGMA100HV unit for lightning and switching impulse testing?

The ISOBE5600 transient recorder is the perfect solution for high-voltage applications, and is therefore the ideal replacement for SIGMA100HV.

In addition, the Perception HV-IA (high-voltage impulse analysis) software module is tailor-made for HV applications.



More information at:

[www.hbm.com/isobe5600](http://www.hbm.com/isobe5600)

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measure and predict with confidence

