High-Precision measurement device

ADClab

Multimeter "Flash-Recorder-3M mod. 3,4,5,6

Multifunctional ADC/DAC modules and devices for wide range of measurement and testing tasks

Compact measuring systems for field conditions and mobile applications

Cutting-edge devices are designed either for laboratory or harsh conditions due to extended operating range. Module can be connected to PC via USB, Ethernet or Wi-Fi.

Devices are meant for recording, processing and analyzing data (pressure, acceleration, temperature, electricity (current, voltage) etc. from different types of sensors.

This devices line can operate as data logger that registers data at internal memory, external storage, or transmits data to the Cloud service. Data is stored long. Information is received from a sensor or a sensor built in the device as well as from external tools.

FIELDS OF APPLICATION

Test benches

Research institutions

Manufacture

Transportation

Construction

Agricultural industry

Laboratories

Security

Energetics

Medicine

Excellent price-quality ratio

High polling frequency combined with a minimum error allow you to get a high-quality result at a lower cost due to the multi-channel nature of the devices

Easily integrated into industrial controllers and ready-made systems

ADVANTAGES

Universal functionality for a wide range of typical measurement and control tasks

Unlimited comprehensive technical support

Multifunctional digital Multimeter "Flash-Recorder-3 M3"

Flash-Recorder-3 M3 – a universal device that is designed for making tests within field conditions and harsh environment with a wide temperature range.

10000 mAh battery allows you to apply the device distantly up to 8 hours of continuous operation.

A user can configure functions remotely via Wi-Fi or Ethernet connection and conduct real-time tests such as explosions, continuous structure measurements, bridges and railway monitoring etc. Multimeter has a high ingress protection IP67, a durable case and reliable connectors.

Modern software and unlimited support enable you to make precise measurements and solve difficult issues with high efficiency.

Technical details

ADC 2x16 bit, 32/16 channels
Sampling rate 200 kHz
Gain factors 1, 4, 16, 64
Measurement error not more than ±0.5 %
Windows 7/10/11 OS
Input range ±10 V
Interface USB (high-speed), Ethernet, Wi-Fi
Flash card
Battery 10000 mAh
Included software
Operating conditions -30 … +55°C, at 5 - 85 % of humidity

Multifunctional digital Multimeter "Flash-Recorder-3 M4"

Flash-Recorder-3 M4 – is a compact register of analog and digital signals and meant for recording, processing and analyzing data (pressure, acceleration, temperature, electricity (current, voltage) etc. from different types of sensors. One of the main tasks is logging analog data. It operates as multichannel oscilloscope and can record and store big data in memory.

It works under operation of Linux OS based on ARM processor and has the widest capabilities. Software is designed and updated at the request of customers. The standard software package has the ability to work with the device via an Ethernet network interface within the SCP protocol.

Flash-Recorder-3 M4 is the best solution for **laboratories** and **research institutions**.

Technical details

ADC 2x16 bit, 32/16 channels
Sampling rate 200 kHz
Gain factors 1, 10, 100, 200
Measurement error not more than ±0.1 %
Linux OS ARM proc.
Input range ±10 V
Interface USB (high-speed), Ethernet
Flash card
Battery 5000 mAh
Including software
Operating conditions 0 … +50°C, at 5 - 85 % of humidity

Multifunctional digital Multimeter "Flash-Recorder-3 M5"

Flash-Recorder-3 M4 – is high-speed version of the product line. The main feature is built-in ICP power supply for channels with 3 MHz sampling rate. 10000 mAh battery allows you to use the device distantly up to 8 hours of continuous operation.

One can configure it remotely via Wi-Fi or Ethernet connection and conduct real-time tests such as explosions, continuous structure measurements, bridges and railway monitoring etc. Multimeter has a high ingress protection IP67, a durable case and reliable connectors.

You can choose convenient software and configure it depending on task. A wide range of programs allows you to solve issues with high efficiency.

Technical details

ADC 16 bit, 8/6 channels ICP powered
Sampling rate up to 3 MHz
Gain factors 1, 2, 5, 10
Measurement error not more than ±0.5 %
Windows 7/10/11 OS
Input range ±10 V
Interface USB (high-speed), Ethernet, Wi-Fi
Flash card
Battery 10000 mAh
Including software
Operating conditions -30 … +55℃, at 5 - 85 % of humidity

# Multifunctional digital Multimeter "Flash-Recorder-3 M6"

A universal device is designed for continuous electricity (currents, voltages) measurements on power plants, manufactures and offices with expensive equipment.
The main feature is controlling and recording: voltage excess, short circuits, network irregularities.

✓ It is necessary to:
- Warn and prevent electrical appliances from damage,
- Identify electrical network problems,
- Avoid power outages,
- Prove an external malfunction,
- Decline responsibility and be refunded.
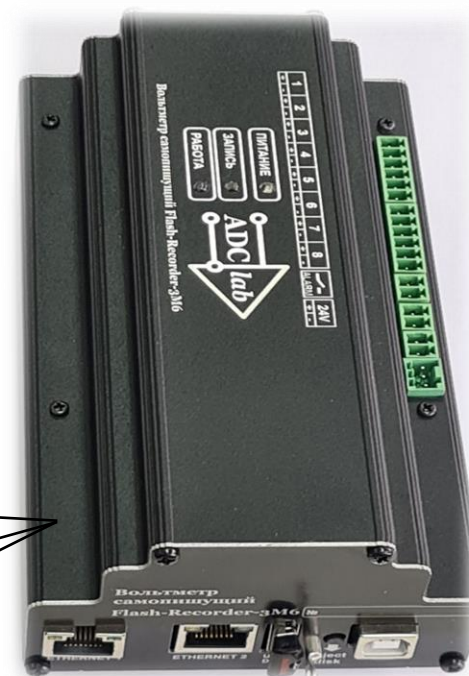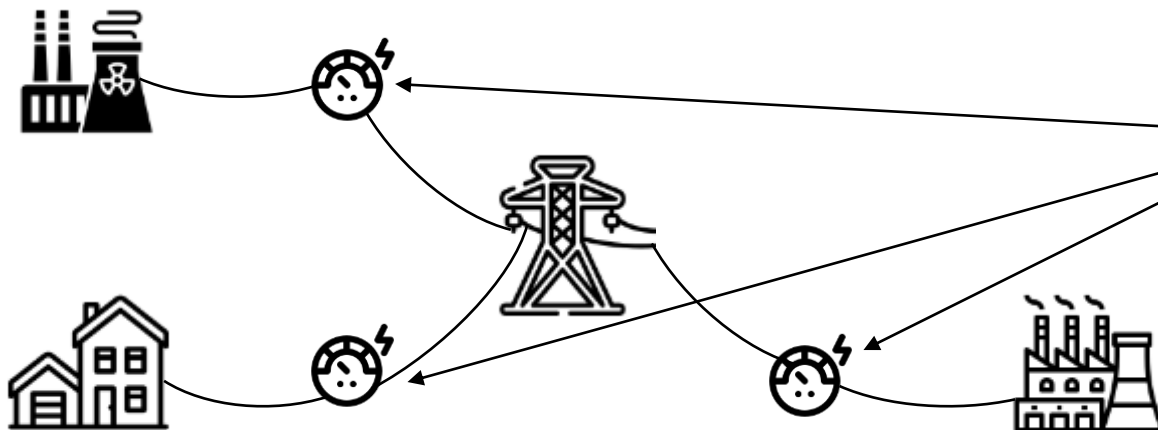
If you have suffered from power outages and your expensive equipment has been damaged, you can prove the supplier's negligence and request compensation based on the records from **Flash-Recorder-3 M6**.
Being an energy supplier and monitoring malfunctions, Flash-Re4corder-3 M6 is sure to prevent accidents and provide you energy security.
Easy to handle: The device is mounted into power supply shield, connected to the network and configured threshold values. It's ready to operate! **Flash-Recorder-3 M6** will notify you if anything is wrong.

Multifunctional digital Multimeter "Flash-Recorder-3 M6"

Technical details

ADC 2x16 bit, 32/16 channels
Sampling rate 180 kHz
Gain factors 1, 2, 5, 10
Measurement error not more than ±0.1 %
Linux OS ARM proc.
Input range ±10 V
Interface USB (high-speed), Ethernet
Flash card
Including software
Operating conditions -30 ... +50°C, at 5 - 85 % of humidity

Basing on this line of devices one can create a testing system to solve issues with high-efficiency. Comprehensive assortment of hardware and constantly improving software allow you quickly and accurately record, collect and process data.
To operate big data one can use the device as a multichannel oscilloscope.
Assemble your own measurement complex or get a turn-key solution with us.

Contemporary visualization software "LOOKALF" related to Flash-Recorder-3M

"LOOKALF" programme is designed to view, analyze, explore and transform data recorded by Flash-Recorder-3M devices. It helps you to decipher data from the large number of different types of sensors up to 1200 signals at a time.

ADVANTAGES

Accurate	Flexible	Scalable	Programmable
Maximize the absolute accuracy of your measurements for automatic data acquisition with a wide range of software configurations	Lots of graphics and pie-charts cay be displayed on the screen, provided that you make a great number of measurements using a various sensors	One can display on the screen both long-lasting and very short files to increase the efficiency	Program your hardware with the same API including Python, ANSI C, C#. Or, use interactive software without writing code.

- Up to 36 windows (pie-charts, diagrams, tables, depictions), with 32 channels available for each of them can be displayed on the screen
- Real-time measurements are available
- It is possible to make continuous tests with capturing fast-flowing processes and signals
- You can replay all the recorded files
- Lots of functions and formulae are available (also your own formula)
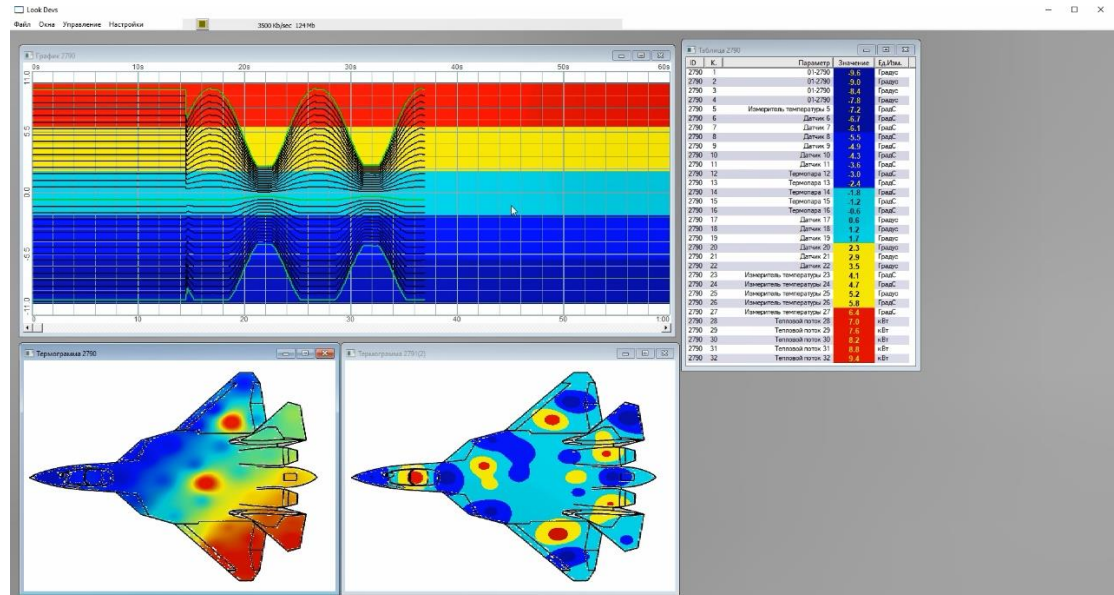
To make your measurements and tests highly efficient we've added the function of converting and interacting signals with each other via various methods: spectral analysis, table functions, RMS values, linear transformation, averaging, addition and substraction, min/max values, displacements etc.

Contemporary visualization of software "LOOKALF" related to Flash-Recorder-3M

Make it easy. Thanks to unlimited visualizations you can display signals in a free form.

To display information conveniently and usefully you can add real-tests images and place sensors in its current location

VARIABLE FUNCTIONALITY
Multifunction hardware includes options for a large variety of channel combinations and sets of different parameters, including USB, PCI, and PCI Express. Having such a variety you can choose hardware that can handle all the signal types you need.

LONG-TERM MEASUREMENT EXPERIENCE
Over a long period of operation, the company has demonstrated stability regardless of changing external conditions, due to which our customers can trust reliability and professionalism of the ADClab company.

OUR CLIENTS
are large industrial and research institutions dealing with a wide range of industries in many countries worldwide.

OUR PRODUCTION
An important component of the company's success is its own production, which is a modern and technological enterprise with well-equipped divisions and highly qualified personnel. The close interaction of the development and production centers make it possible to effectively coordinate organizational and technological processes within the company, due to which orders are fulfilled without delay. Our clients references are enclosed.

Modern software

ADC lab

www.ADClab.ru