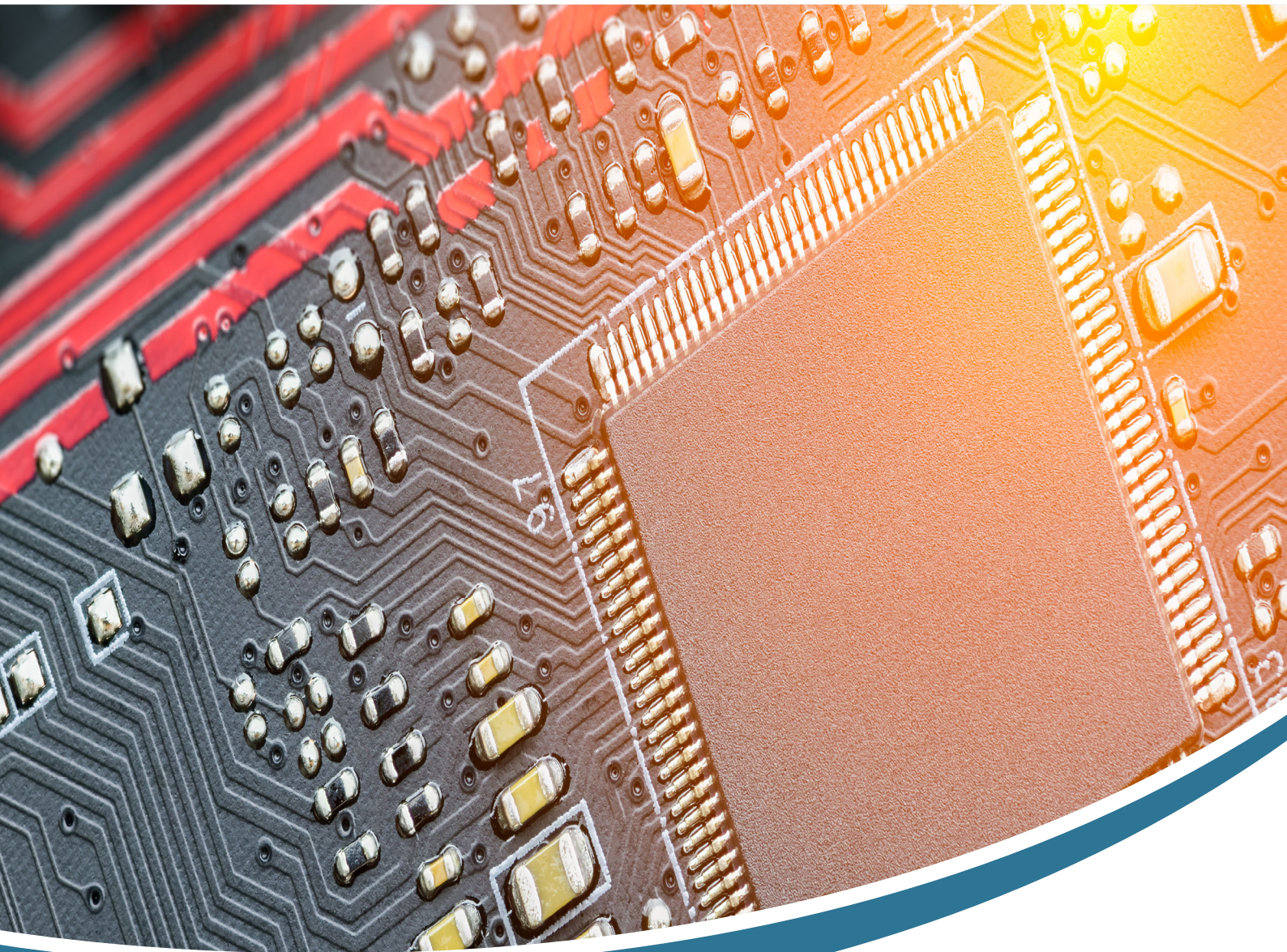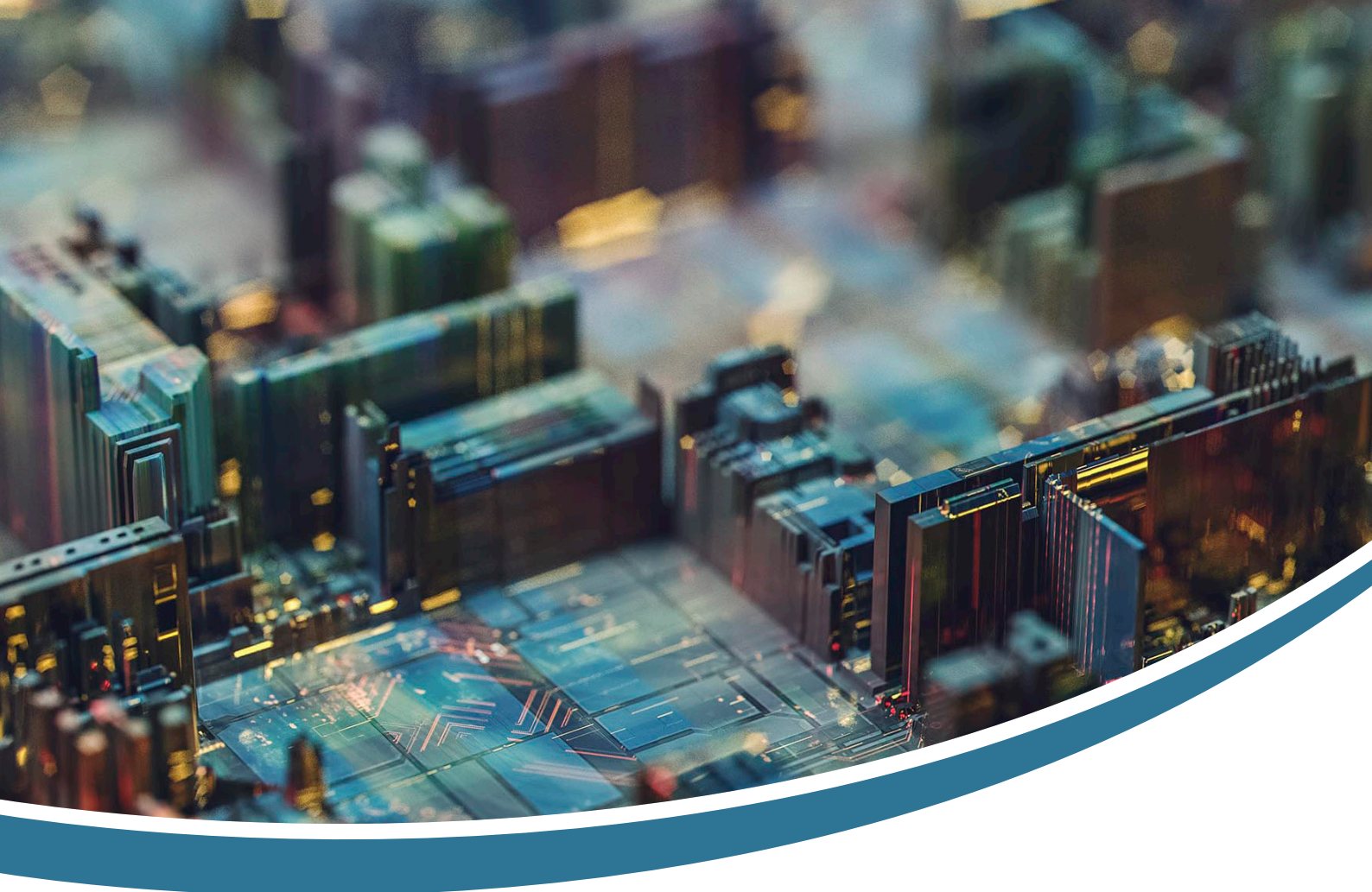# Process Improvement Services
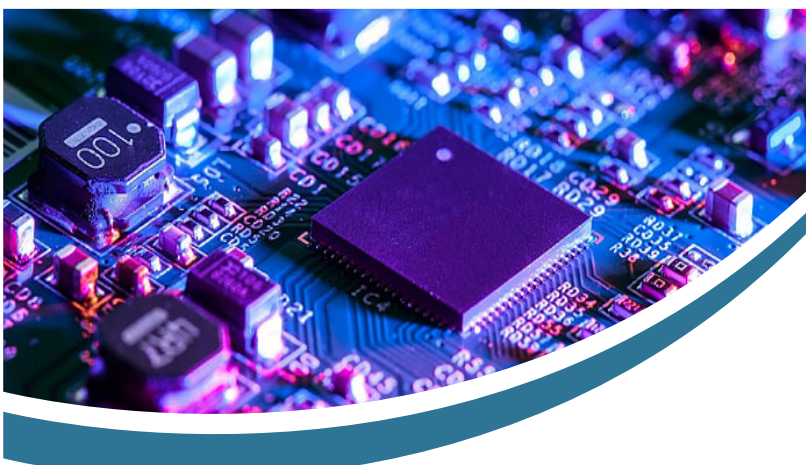
PIS

About US

CREATIVITY AND INNOVATION

Over the few years the company has chosen to make creativity and innovation the fundamental assets on which to build its competitive advantage, and has shown the ability to adapt its expertise and business model to opportunities that are evolving continually, while maintaining its identity as a provider of cutting-edge solutions for its customers and always aiming for the highest degree of reliability.

A junior innovator and pioneer in the electronic and industrial sector, in order to maintain and apply this know-how and grow constantly over time the company has developed a broad network of partnerships, not only with the protagonists of the tech world, but also with universities, research centers, and innovative start-ups. Over its history PIS has frequently extended its scope of activity beyond the confines of its traditional business, achieving exciting goals in recent years.

Our Services

Bus Interface Board

Information exchange is an essential part of tests and measurement. The uploading of test data, the issuing of control instructions, the data summary of distributed nodes, data monitoring and processing, diagnosis and monitoring are all inseparable from the exchange of information.

With the continuous development of modern test and control and the continuous increasing requirements for communication interconnection in industrial tests and control systems, many methods of information exchange arose according to the volume of data and distance of data transmission, so users can select different information exchange technology and communication ways according to their own requirements.

We have range of communication interface modules, including ARINC429 bus interface module, serial interface module, CAN bus interface module and so on. ARINC429 bus interface module can be chosen with module configurations of 1/4/8/16 receiving 1/4/8/16 sending, and so on to meet different requirements of input and output interfaces.

Serial port interface module can be chosen with both isolated and non-isolated modules of 4-channel, 8-channel and 24-channel. CAN bus interface module can be fitted with module configuration of 2-channel/20-channel and support CAN2.0A/B. Besides above products, we also provide customized communication products to meet users' different requirements. The design and production evaluation of various modules we provided which can be widely used in all kinds of test and control systems and communication systems are carried out strictly in accordance with national standards, industrial standards and the communication protocol specifications.
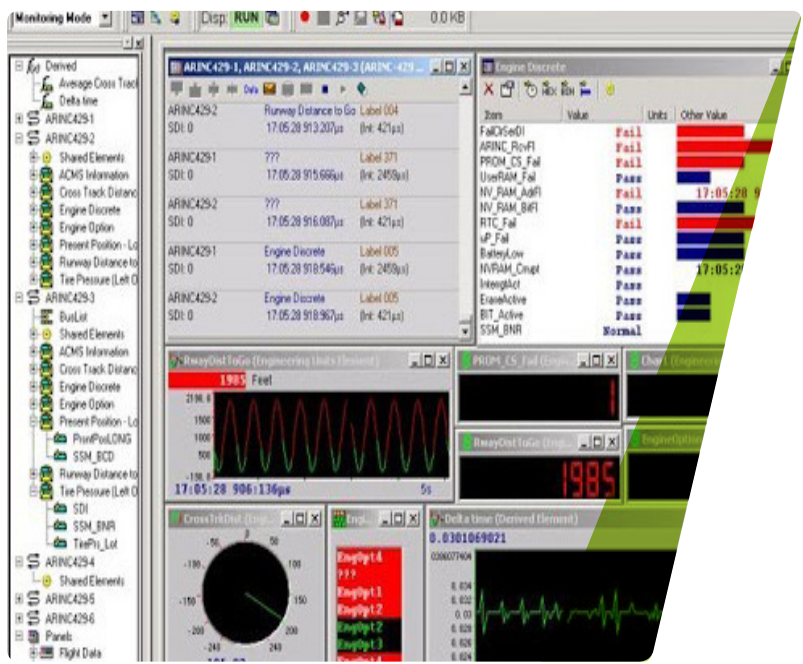
Bus Interface Modules:
  ARINC429 Bus Interface Module
  Serial Interface Module
  CAN Bus Interface Module

ARC-429-XXX-USB

Portable ARINC 429 to USB Converter

- On Board resources
    (200 MHz processor, 64Mbytes RAM, 16MB
- Flash, 256Mbytes NAND Flash)
- Available in a combination of 1Tx / 1Rx Channels
- 8 User programmable Discrete Ios
- Supports up to max 32 Channels
- > 1/4/8/16 Transmit Channels
- >1/4/8/16 Receive Channels
- Configurable for High Speed/Low Speed
- 128 x 32 bit Static RAM Interface on each Arinc429 node
- Programmable interrupts Receive Data time-stamping
- Transmit Data Scheduling (Asynchronous/Synchronous) messages
- Two 32 x 32 Transmit FIFO on each Arinc429 node
- Graphical User Interface Software for Bus Analysis and Simulation
- Software Driver support Windows 10, Linux.

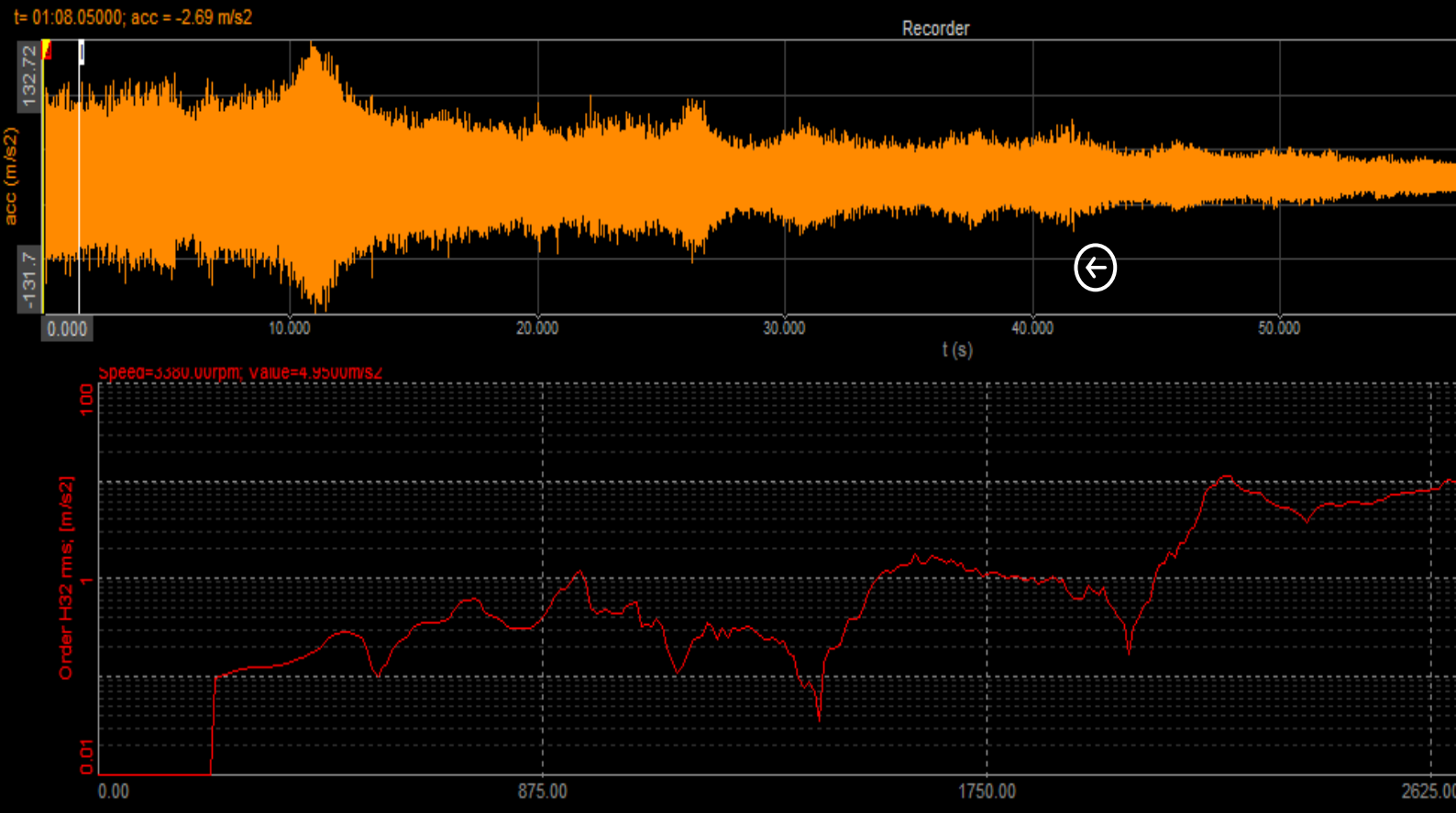# USB to RS232/RS422/RS485 Optical Isolated Converter

PISC-00-002

Product Content Description:

The PISC002 allows you to connect your serial devices to systems by using a USB interface. With data format auto detecting and baud rate auto switching functions, PISC002 is automatically able to detect the data flow and switch the direction of the data lines as well as to automatically configure RS422/485 signals to any baud rate without external switch setting. Equipped with 3000VDC of isolation and internal surge-protection on each data line, PISC002 gives the host computer and module itself entirely protection from destructive voltage spikes and dangers of unregulated voltages input. TRP-C08 also features a high-speed 115.2 Kb/s transmission rate, and supports various O.S.
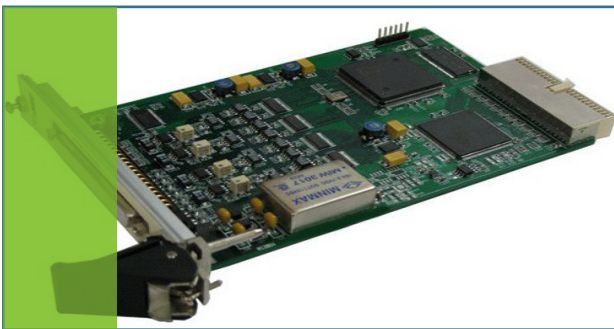
Specification:

. Power input voltage: DC +10V to +30V

. Input: Standard USB 1.1 protocol.

. Output: RS232 signal standard 5 full duplex (TXD, RXD, CTS, RTS, GND).

RS422 signal differential 4 full duplex wires

RS485 signal differential 2 half-duplex wires

. Cable: USB type A to type B

. Communication speed: Form 1.2 to 115.2Kbps auto-switching

. RS422/485 line protection: Against surge, short circuit, voltage peak

. Distance: up to 4000ft (1250M)

. Connection type: Screw terminal for maximum AWG 12 wire
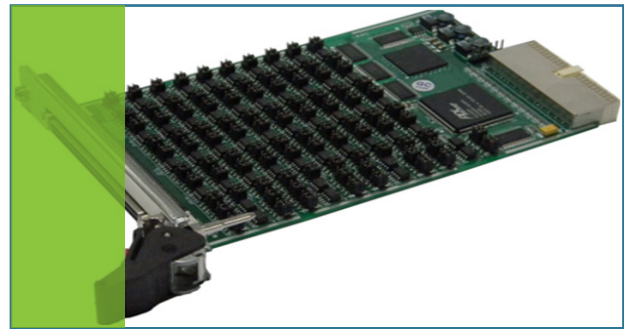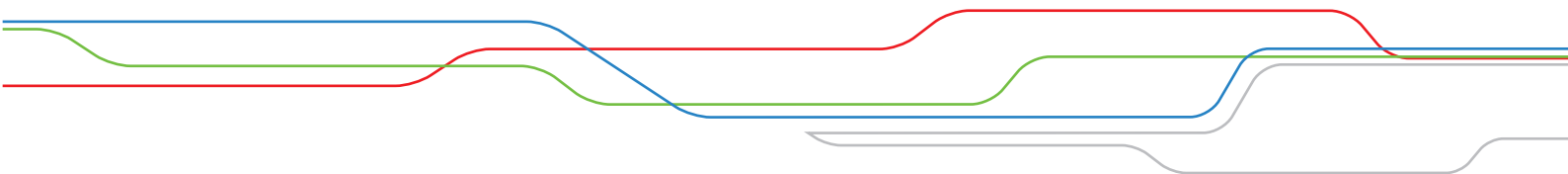
. Signal LED: Power on, TX, RX

DATA ACQUISITION MODULES

PISD-08P-M-00
8 Channel Parallel DAC Function Board

.Quantity of channels: 8-cahnnel parallel DA
. Resolution: 16 bit
. Max updating rate: 1MHZ
. Output range: ±10V
. 48-channel bidirectional TTL level digital input / output

PISD-96D-M-00
96 Channel Discrete Input Function Board

. Standard 3U module (front wiring)
.96-channel discrete input
. Maximum input level range: ±60V
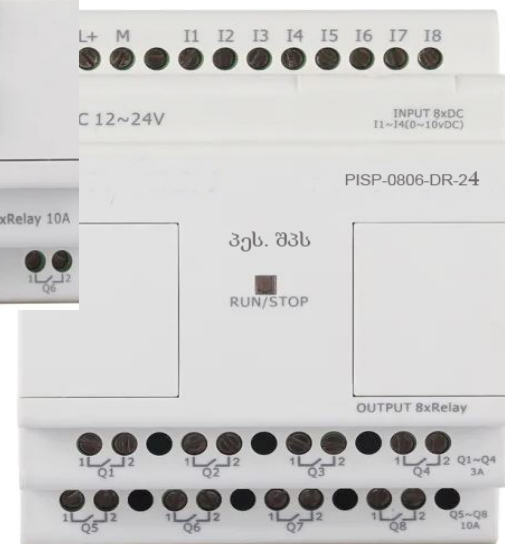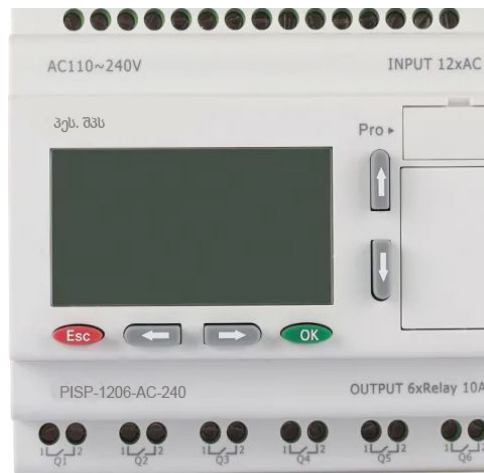. Logic threshold: high level +18V~+36V, low level: 1V~+1V

Industrial Automation

PIS HAS BEEN PROVIDING OUTSTANDING SERVICES AND SUPPLYING ONLY THE HIGHEST QUALITY PRODUCTS IN THE INDUSTRIAL AUTOMATION FIELD. WE ARE AN ENGINEERING COMPANY AND THEREFORE SPECIALIZE IN ALL INDUSTRIAL ELECTRONIC PRODUCTS AND SERVICES. INDUSTRIAL ELECTRONICS IS A CONCEPT WHICH IS SIMILAR TO CONSUMER ELECTRONICS, BUT IT DIFFERS IN THAT ITS MAIN FOCUS IS WORKING ON MANUFACTURING EQUIPMENT RATHER THAN YOUR COMMON CONSUMER ITEMS.

PISP-1206-AC-240
PISP-0806-DR-24

Timers: 512

Counters: 512

Function Blocks: 512

Operation temp. : -20ºC-55ºC

Storage :-40ºC-70ºC

Protection : IP20(Non-waterproof)

RTC accuracy : MAX ±5S/day

RTC time intervals : 512

RTC Backup at 25 °C : 100 hours

Power-off receptivity : yes

Modify parameters via keypad LCD: yes

Dimensions : 95*90*61(mm)

Certificate : CE

Installation : 35-DIN rail or screw for installation

Expansion capacity: 9 modules (PR-E-16, CAN BUS)

Password protection : Multiple password protection

Communication interface : TTL interface , 1 RS232 port & 1 RS485 port

Communication protocol : Modbus RTU/ASCII

HOME AUTOMATION

The building and home automation market is universally ever-more connected to private and public digital networks and thanks to these automated systems and applications, buildings are destined to provide an increasingly fundamental contribution to the smart city.
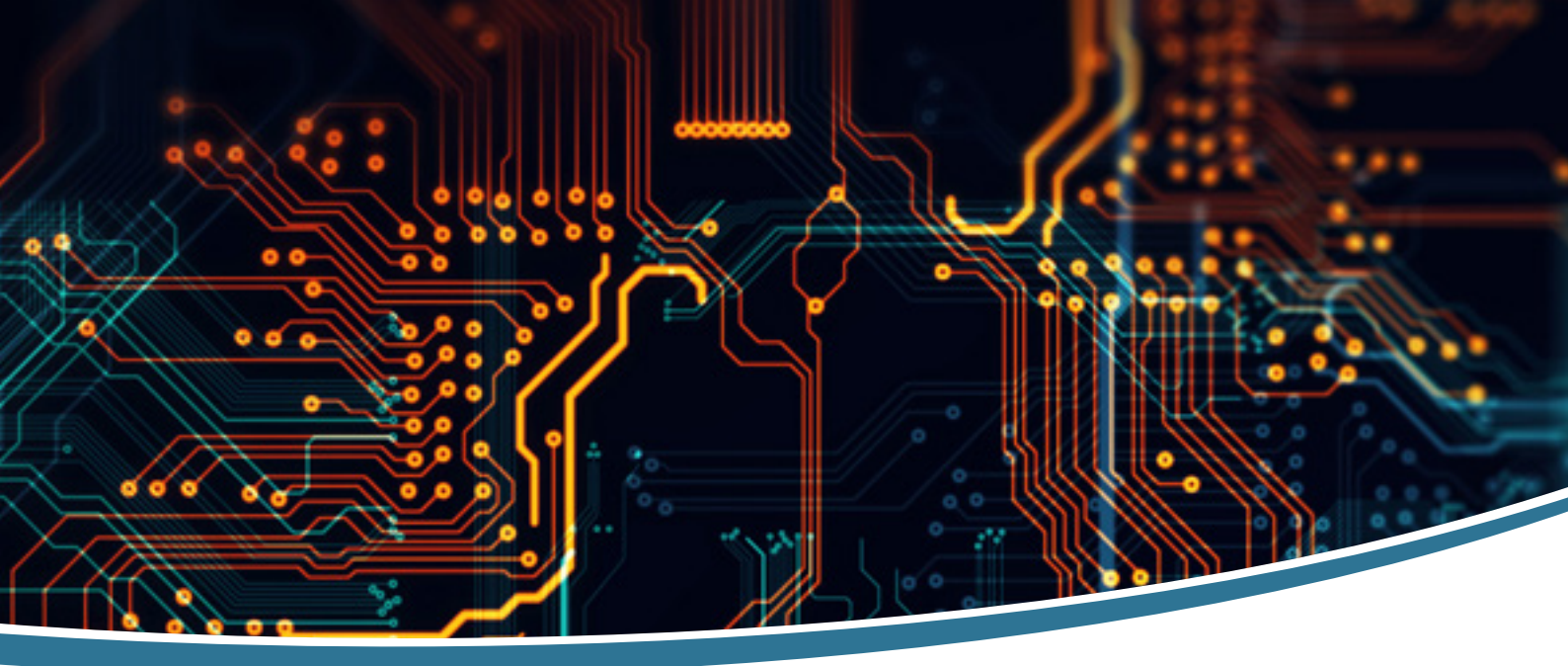
In the area of building automation, and more specifically in that of domotics (or home automation) when the structure of reference is a dwelling (smart home), a domotics system is able to control various functions such as room temperature, lighting, devices for entertainment and safety, alarm systems and those governing building access (elevators, door entry systems, etc.).

In the case of the "smart home," such devices, if connected to the internet, allow for multiple IoT applications: usually via a central gateway, you can manage and control the various devices in a genuine domotic system, whose user interface occurs through terminals (desktop computer, tablet, smartphone) with a specific application and which are remotely accessible.

PISA-00-001/002

- Access methods: password & key

- Deadbolt detection

- Leading code function

- Z-Wave control with Security S2 protocol

- Add/Delete user's code individually

- Temporarily disable user code

- One-time-user code available

- Low battery alarm

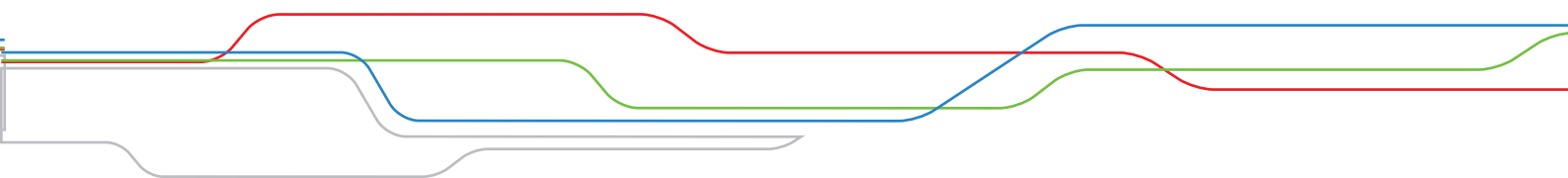- IP54 Zinc alloy and steel housing design

CUSTOMIZED HARDWARE and SOFTWARE

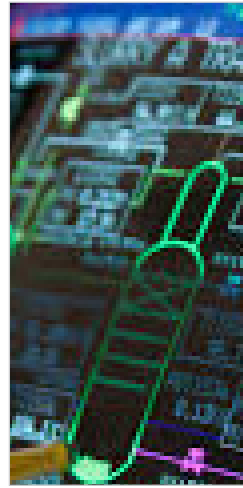## YOUR TECHNOLOGICAL PARTNER FOR CUSTOMISATION

The expertise and the broad network of partnerships with leading tech sector companies and innovative start-ups around the world allow PIS to provide customers with solutions and services that are always on the cutting edge of technology, particularly with solutions based on AVR, ARM and FPGA architectures.

The services that revolve around hardware and software customization have historically been among the elements that have made PIS stand out. From design revision, which implies an accurate process of analysis and testing, to support in the personalization of ideas depends on your requirements, to the creation of tailor-made solutions for specific needs: in every phase of the project, PIS offers a high level of product personalization and supports the customer in choosing the best technological solutions available in the market to optimize performance, cost and services that give the greatest added value.

The process doesn't end at the time of sale: PIS takes care of the project by guaranteeing long-term support for the product's entire life cycle, ensuring the highest-quality and long-lasting customer care.

- Design Review,

- AVR, ARM, FPGA Know-How & Cross-Platform Design

- Secure your design and production

- BIOS Tuning

- Firmware & Driver Support

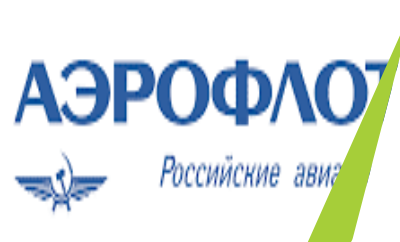- We take care of your project, with lifetime support

OUR PARTNERS

Alta dt data technologies

ADVANTECH

IDEC Think Automation and beyond...

AVIASERVICE LLC	http://aviaservice.biz/
Georgian Airways	https://www.georgian-airways.com/
Wissol Petroleum	http://wissol.ge/
Liberty Bank	https://www.libertybank.ge/
LOT Polish Airlines	https://www.lot.com/pl/en/
JSC RMG Copper	https://www.richmetalsgroup.com
College for Tomorrow's Success (CTS)	https://www.aviationcts.ge/
Rustavi Steel	http://www.rmp.ge/
KTW Wine Factories	http://www.Ktw.ge
HeidelbergCement Georgia	https://www.heidelbergcement.ge/
EasyJet	https://www.easyjet.com/en

SOME OF OUR CLIENTS

We're Here To Help You

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