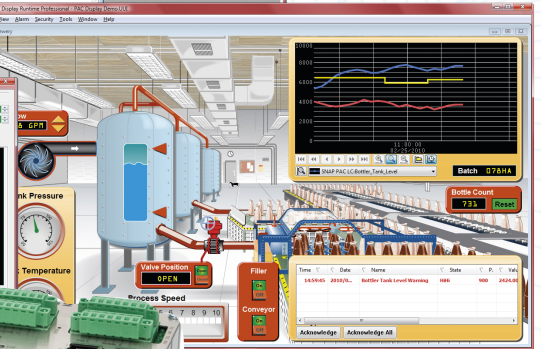
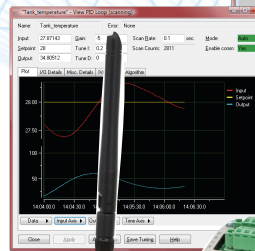
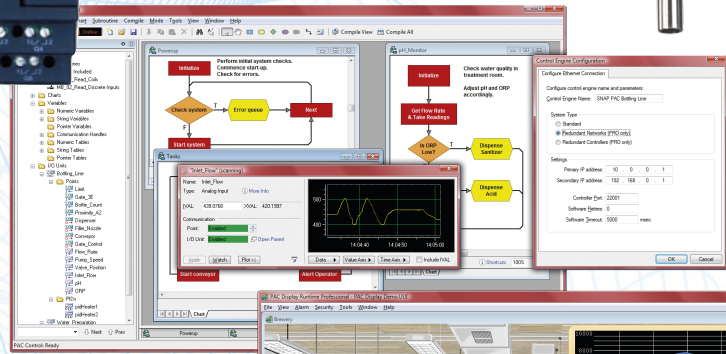


COMPLEX IDEAS. SIMPLE SOLUTIONS.

SDUK

SYSTEM DEVICES UK LTD



For all your process monitoring, control or data acquisition needs

"...SDUK's experience was invaluable in helping us to design and build a very complex system..."

Steve Bell, SHARP UK Manufacturing

For all your process monitoring, control or data acquisition needs

System Devices has a unique industry pedigree, providing automation solutions for nearly three decades. With 150 years of combined engineering experience, we deliver where others may hesitate.

We offer a comprehensive range of hardware to ensure the varying needs and size of any project can be addressed with proven solutions. We know what works and what doesn't, so we use that experience to provide a match of product-to-need. Quality and reliability are mandatory requirements, so our products are developed and refined to always be fit for purpose. And if you don't have the resource to design and build your own solutions, that's not a problem. We'll do it for you.

Our industry is characterised by rapid advancements, so we'll ensure you're always kept up to date with latest developments. But that doesn't mean trying to constantly sell you new products. We're committed to the concept of legacy support, as good solutions should never become redundant. We regard our relationship with all our clients as long term.

We train your staff to ensure our solutions deliver exactly what you need, and our support is matched to task. We'll give you direct access to our experts through a hotline service, or on-site

when required. Whether you need full troubleshooting or just simple advice.

Our UK warehouse carries extensive stock, so we're often able to provide next day delivery. With a track record of supporting businesses from all sectors across the UK and Ireland, we've grown an enviable reputation for quality and reliability which we intend to protect.



Our portfolio of products is second to none. Each one is built around the concept of providing a quality solution at a competitive price, however small or large your need. Our pre-eminence in the industry dates back to 1983, and our commitment to you has never been stronger.

Our Product Portfolio

- Opto22 automation products
- Epson factory automation products
- Maple Systems HMI terminals
- xLogic SuperRelay PLCs
- Acromag industrial I/O products
- Aaxeon industrial Ethernet switches and media converters

OPTOPARTNER
OPTO 22
OPTO 22
2006 Distributor of the year, Europe

EPSON[®]
Official UK Distributor



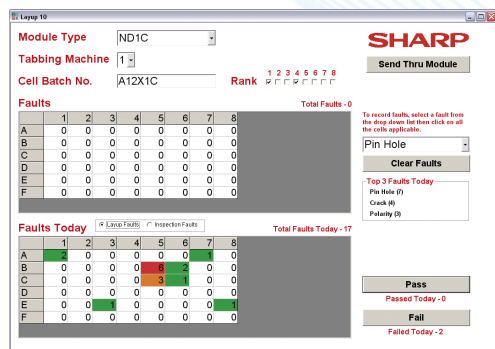
Where appropriate, products are certified to conform to these UK and EU requirements



We have an enviable track record of completing major projects for some outstanding clients – here's just a few:

A SCARA robot solution for SC Johnson

The customer required that a selection of their products could be picked from a moving conveyor and loaded straight into its packaging. This was successfully achieved using the EPSON SCARA range of robots, with integrated vision. Our solution released invaluable time for SCJ's own engineers, giving them a substantial increase in their in-house development resource whilst maintaining a high output production environment.



A Production Line Data Acquisition System for Sharp UK Manufacturing

SUKM required a full system to record and manage data for their solar panel production line. Our solution records data for four separate production lines, each with twelve different station environments, and all from a single and centrally managed SQL Server database. Data input is enabled from a variety of sources, including both manual and automatic bar-coding, in addition to multiple GUI front-ends.

As well as producing accurate management reports, the system has been used to improve production quality by interfacing transparently into existing testing, labelling and packaging systems.

A Landfill Leachate Management System for Lancashire CC

We were asked to design the control systems for a methane stripping plant operated by Lancashire County Council. The new system designed by us enables the plant to run in automatic mode, so that monitoring and adjustments can be made automatically. This greatly decreases the amount of time operators are required on site, reducing costs and increasing productivity.



The text message alert system includes remote access, so alarms can be assessed and action taken without the need to visit the site, increasing response times and further reducing costs.

Other projects include.....

An advanced rotational moulding control system for Rototek, cremator control and reporting systems with emissions monitoring for several UK crematoriums; a microwave oven production line data acquisition system for Sharp UK Manufacturing; crash test and HyGe laboratory control systems for MIRA and Volvo motors; a robotic automated lab test system for National Physical Laboratory; shot-peening control systems for Vacublast. And there are many more.

“...the plant is monitored and adjusted automatically this greatly reduces the amount of time operators are required on site....”

Richard McCann,
Lancashire County Council

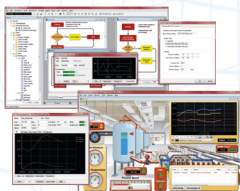
Opto 22 Automation Products

Opto 22 controllers, I/O, solid state relays, and software products link electrical, mechanical, and electronic devices to networks and computers.

A diverse range of products covers everything from solid state relays, Input/Output modules, distributed data acquisition & control systems to Ethernet based monitoring and control systems for real-time asset management.

SNAP PAC System

Opto 22's SNAP PAC System is an integrated system of hardware and software for industrial control, remote monitoring, and data acquisition applications. The SNAP PAC System makes it easier to design, select, and apply an automation system to applications of any size.



PAC Project Basic provides software support and includes tools to create both simulated and full SCADA application systems. What's more it's FREE.

PAC Project Professional adds an OPC Server as well as other tools to create enhanced applications.

SNAP-IT-EMU1

The Opto 22 packaged energy monitoring unit is a complete suite of hardware and software that lets you monitor energy usage for 3-phase electrical devices such as an air conditioning and heating unit, pump, machine, or engine so you can anticipate energy bills and respond quickly when energy use rises unexpectedly. Packaged inside a sturdy NEMA Type 4X polycarbonate enclosure.



The HMI, which is ready to be installed on a PC on the same Ethernet network as the hardware unit, provides real-time and historical data on energy usage.

Designed to be used as is, or expanded to monitor and control other devices as well.

OPTO 22

Automation made simple.



IO4AB

The perfect companion for your Allen-Bradley® System.

Intelligent, remote SNAP I/O from Opto 22 completes your ControlLogix® or CompactLogix® system with extra I/O where you need it.

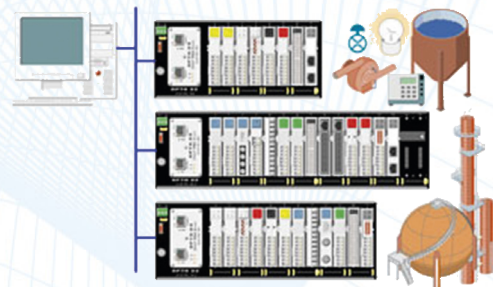
It also contains more advanced process control features, use our distributed intelligence to shift I/O scanning and control to the local I/O level. Reduce network traffic, decrease scan times, and improve overall system performance without additional programming.

PC Based IO

Manage anything, anywhere, from your PC with guaranteed-for-life Opto 22 I/O and distributed intelligence.

Industrially hardened I/O meets demanding specifications and provides local processing at the same time.

Use driver toolkits to communicate between distributed I/O and your custom program.



Solid State Relays

Optically isolated SSRs of all types. Opto22 invented them and they are still the best.

Opto 22 offers a complete line of solid state relays, from the rugged 120/240-volt AC Power Series to the small-footprint MP Series, designed for mounting on printed circuit boards.

All Opto 22 relays have 4,000 volts of optical isolation between the field side and the control side, and all are UL and CSA recognised.

Every Opto 22 solid state relay is subjected to full load test and six times the rated current surge both before and after encapsulation.

**All
Opto22
SSRs are
guaranteed
for LIFE**

“...System Devices fully understood our requirements and provided outstanding support throughout the project...”

John Whiting, SC Johnson

Epson Factory Automation Products

The Factory Automation division of Epson offers a wide range of SCARA, 6-axis and modular linear robot types and sizes.

Epson robots are ideal for small parts transfer, material handling and precision assembly applications. The new generation of robots all feature the use of absolute encoders; use PC based controllers and feature an optional, fully integrated vision system.

EPSON Robots is the global leader in easy to use PC-based controllers, high speed, high precision robots and related factory automation equipment. With over 22 years in the industry.

Our mission is to help our customers reduce manufacturing costs and time to market by providing robots and automation products that are powerful, flexible and easy to use.

SCARA Robots

The G-Series offers over 198 models to choose from with faster speeds, higher payloads, and more rigidity than ever before. Models are available with 250-1000mm in reach and payloads up to 20kg. High performance rigidity technology combined with Micro PowerDrive controllers make the G-Series the SCARA robot to beat on the market today.



The RS3 is a unique SCARA design that:

- Improves cycle times by up to 25%
- Reduces footprint (factory space)
- Has no “work envelope dead space”
- Is capable of handling some applications that previously required 700mm SCARA robots

6-Axis Robots

With PS3, PS5, and a longer reach PS3L models available, EPSON has a great line-up of small to mid-sized 6 Axis robots.

Pro-Six models were designed for high performance ultra smooth motion using Micro Power Drive Technology.

The new EPSON C3 6 Axis robots provide industry leading cycle times AND have best in class motion range. The slimline design also features a compact wrist designed for increased flexibility. Cleanroom/ESD models are also available.

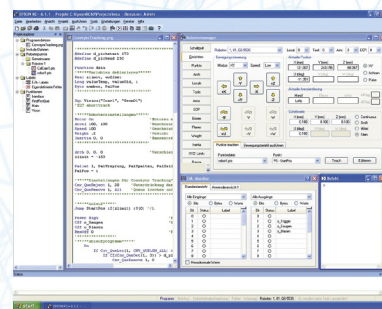


RC+ Software

All EPSON robots are programmed with the easy-to-use, Windows based RC+ software.

With full file and project management support your application is easy to build and maintain.

The optional VB Guide add-on enables you to build integrated GUI applications to further enhance your solution for the end user.

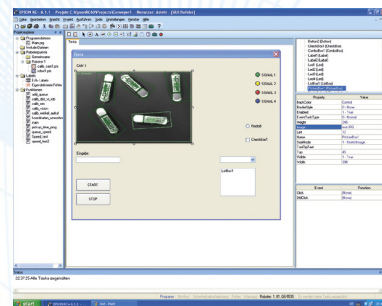


Vision

Like modern robots, machine vision is a technology that has also benefited greatly by the advances in computer hardware and software.

Linking robots and vision systems together, gives users the ability to inspect a work piece and guide the robot based on the machine vision feedback.

Rather than re-inventing existing technology, EPSON's philosophy is to make use of best-in-class automation solutions. The challenge is then to integrate with robots in a seamless and easy to use fashion. Vision Guide is EPSON's state-of-the-art solution for robot guidance and inspection.



"I'm amazed that the product cost is so low, given how effective it's been in my business. The fact that the software is FREE is also a major bonus."

Karl Ellis,
New Century Systems Ltd



xLogic SuperRelay PLC

Easy Electronic Co. offers a wide range of low cost programmable logic controllers and IO expansion units. It is specifically designed to replace timer relays in motor control panels and a competitive alternative to Siemens Logo, Idec, Moeller and similar PLC manufacturers.

The xLogic SuperRelay is a compact and expandable CPU replacing mini PLCs, multiple timers, relays and counters. The xLogic SuperRelay perfectly fits in the space between timing relays and low-end PLCs, and is available in 120V/240V AC or 24V DC versions, making it the ideal solution for relay replacement, or simple control applications such as; building and car park lighting, access control, watering systems, pump control, ventilation systems, home automation and a wide field of other applications where cost is a primary design issue.

Available with a common mix of digital input, digital output, analogue input, PWM output, high speed pulse counting, Real time clock and time switch functions.



ELC-12 Range

The ELC-12 range is the entry level model, incorporating a good mix of digital and analogue I/O, clock with calendar, counters, timers and serial communications. Easy to configure with drag-and-drop function blocks using FREE xLogicSoft software.



ELC-18 Range

The ELC-18 range is the advanced level model, incorporating a good mix of digital and analogue I/O, clock with calendar, counters, timers, LCD, keypad and an expansion port.

The ELC-18 range offers a 4-line LCD display and keypad for program modification or display and control whilst the program is running. An expansion port allows the connection of up to 31 expansion modules, extending the I/O channel count and adding Ethernet and SMS text communication capabilities.

There is also an economy version of the ELC-18, which provides a more cost effective CPU with no expansion capabilities.



ELC-Expansion IO

Expansion Units enhance the basic range to provide additional capabilities such as;

- A range of Digital and Analogue IO
- RS485 connectivity
- SMS communication
- Ethernet connectivity



Maple Systems HMI Terminals

Maple Systems Human Machine Interface (HMI) and Operator Interface Terminal (OIT) products are affordable touch screen and alphanumeric terminals that interface with over 80 families of PLCs and motion controllers, including Allen-Bradley, GE Fanuc, Siemens, Opto22 and many more.

Micro OIT & OIT Family

A low price, rugged & reliable terminal with user definable keys and slide in legends.



Compact in size, these customisable displays come in 2 or 4 line by 20 character varieties in either LCD or VFD types. Screen dependant function keys compliment the display.

There is even a version for use in hazardous environments

HMI5000 series

The most affordable touch screen available on the market this terminal is available in 4.3", 5.6", 7", 10", 10.4", 12.1" & 15" sizes.



All have 65k colour graphics and animation capabilities and come with a real time clock and the facility to store recipes.

This superfast terminal can perform operations at speeds up to 400 MHz and supports a broad range of controllers.

Other features of this terminal include; No fixed touch cells (place unlimited objects anywhere), stackable objects, pop-up windows, a simulation mode and Ethernet connectivity on terminals 7" or above in size.

HMI Open series

The HMI Open series of touch screen terminals is available in 5.6", 12.1" & 15" sizes and all have 65K colour graphics capabilities.



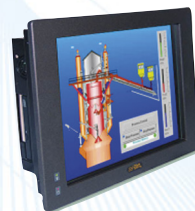
A graphic library of more than 250 symbols is available with this series and existing bitmaps can also be imported.

Running Windows CE or XP, all terminals in this range have Ethernet connectivity and can perform operations at speeds up to 200 MHz

Other features of this terminal include alarm and event monitoring

Panel PC

The Maple touch screen panel PC is a powerful industrial computer running Windows XP Pro. These rugged touch panel computers are NEMA4/12 (IP65) Rated, CE and FCC.



The Panel PC is available in 10.4", 15", 17" and 19" sizes.

**Interfaces
with over
80 families
of PLCs and
motion controllers**

"It's such a refreshing change to find the products we need are fully compatible with our existing systems."

Pal Kayla, IMACSS



Aaxeon Industrial Hardware



Lanolinx Industrial Ethernet Switches

Designed to meet the demanding specifications of the industrial automation and transportation markets 10/100/1000T switches available with up to 16 ports. Also in the range are extended temperature and PoE varieties



OptoLinx Media Converters

Industrial grade media converters available in standalone, DIN Rail and 19" rack mounted versions.



Serial to Ethernet Converters

Our Serial to Ethernet products provides RS-232/422/485 to Ethernet conversion. We offer 1, 2, 4, 8 and 16 port Serial to Ethernet Device Servers.



Industrial Wireless Products

Our Industrial Wireless Products allow you to wirelessly connect to your serial devices and Wi-Fi Networks easily.

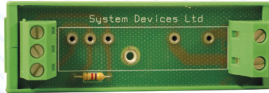
Includes Bluetooth to Serial, IP gateway and USB products as well as serial to Wi-Fi servers, AP/Bridge/ Repeater products and a range of wireless routers, all built to the highest standards demanded by industrial environments.

Custom Products

For those troublesome occasions when there isn't a product to support your particular need, we have a full design and supply service to help create and manufacture hardware to your specific requirements. The following is just a small selection of products developed in collaboration with our customers.

G4Single and G4Double

G4Single & G4Double are designed to accept Opto 22's Generation 4 family of I/O modules in applications where only one or two modules are required to be fitted to a DIN rail. As there is no physical connection between adjacent channels, these DIN rail mount racks may be used to accommodate modules of different control voltages, and can be used in both negative and positive true logic environments.



Custom Robot Interface Unit

The SRC320/RC420/RC520 Robot

Interface allows the robot integrator to very easily and quickly connect field devices, such as sensors and solenoids to the robot controller's I/O port.



The unit offers great savings in materials, design and manufacturing times over traditional own built interface panels using conventional components.

Thermal pads for SSR

Manufactured to our specifications, the TP1 offers an ideal alternative to silicon grease in the thermal interface between solid state relays and associated heat-sink.

DIN rail mounting SSR

A DIN rail mounting heat sink and solid state relay assembly is available, based upon Opto 22's range of industry standard solid state relays.



Any standard Opto 22 chassis mount relay can be accommodated, with or without the addition of 1/4" QC terminals.

The heat sink exhibits a 1.7C/watt thermal dissipation characteristic. This assembly utilises the TP1 Thermal pad for enhanced thermal characteristics.

Custom fabrication

Our fabrication facility is available to those customers requiring an I/O rack assembly outside of the standard range of products; especially those shown in Opto 22's standard rack catalogues.



Custom assemblies can be manufactured to suit the absolute requirements of your project. Please call for assistance.

For further details about the comprehensive range of products and services offered by System Devices UK Ltd you can call us on **(01928) 571977** or visit our website at www.systemdevices.co.uk



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