

# Your Home of Engineering

Helping you take on the world's toughest challenges

Be prepared for anything with our broad range of products



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## Where do you go when you need a solution?

### Your home of engineering Being your first choice.

No matter how big or small the problem you encounter, we're here to help you take on whatever life throws your way. That's why we're your home of engineering.

RS is the only company that can offer engineers a place to research, design, prototype, build and maintain their product or application.

Across the design, build and maintain spectrum, we want you to get that 'welcome home' feeling when you come to RS.

#### Why make RS your home?

We know what our customers need, and make things easy for them. We offer you reassurance that, with a broad range of products which is constantly growing, everything you need is housed at RS and available at the click of a button.

We have an outstanding breadth of products and services across all markets and applications. Specifically our extensive range of technologies, new products and DesignSpark tools.

With brand new products constantly being introduced, you can be at the forefront of your field. We offer a high-quality own label range of products with our RS Pro collection, which provides high-performance components at great-value prices.

But that's not it. We boast excellent supplier relationships with the industry's leading brands, so you can pick the right products for you and get them all in one place. That means you can be assured of competitive pricing without having to shop around.

We have 500,000 products in stock globally, and they can be delivered as soon as you need them with same day or next working day delivery via a global network of distribution centres.

And for the times when you need a little bit of extra assistance or guidance, our dedicated customer service and technical teams will do everything they can to help.

RS isn't just a place for any engineer to come, RS is your place to come. We have the solution for every single one of your needs and offer a personal service to each of our customers.

We want engineers of all disciplines to feel at home when using our services, and to always make us their first choice.

#### The product of your future

But we do more than just offer products – as a business, we feel it's vital to support the ambition and inspiration behind each and every engineer who comes to us.

To encourage future generations to follow their dreams, we're sharing and supporting remarkable real-life stories from our customers and suppliers who have achieved incredible feats.

Experience the incredible journeys of people in our industry and learn more about how we're for the inspired by visiting our website.

Engineers are people with big ideas – and for that, there's also DesignSpark. We understand what you want to know, and want to help you quickly and easily source solutions to your problems.

That's why we created DesignSpark – an online community for engineers which gives you additional tools and expertise to turn those big ideas into reality.

#### That familiar feeling

We have resource for every different area and aspect of engineering, all in one place. Whether you're a mechanical, industrial or maintenance engineer, an architect, designer or just an enthusiastic hobbyist, we're here to help.

We have the right product, service and advice – so you can achieve whatever you set out to.

#### Leading Suppliers



#### Join the conversation



#### Terms & Conditions

To view our latest prices, charges and full terms see RS Conditions of Sale as set out online at [nz.rs-online.com](http://nz.rs-online.com).

RS Components Ltd. 2018



## ON Semiconductor and RS Components aspire to new heights with innovative ideas

**ON Semiconductor is a leading supplier of semiconductor-based solutions, offering a portfolio of energy efficient products that help engineers solve design challenges in many industries, including the automotive, computing, medical, consumer, industrial, and military industries.**

RS Components ("RS") has been an important distributor of ON Semiconductor for several years. RS entered into a partnership with ON Semiconductor by distributing its products in Europe, but has since begun distributing ON Semiconductor products globally, including in the Asia Pacific region.

According to Lisa Liu, Assistant Director of Asia Pacific Channel Marketing at ON Semiconductor, "RS has helped us introduce our new products to many customers in Asia Pacific." Liu adds that RS has extensive reach in many Asia Pacific markets, such as China, Australia, and growth markets in Southeast Asia.

### DesignSpark: The competitive advantage

In addition to RS' strong distribution capabilities, ON Semiconductor has been highly pleased with DesignSpark, which is a pioneering online portal built by RS for the global engineering community. Engineers use DesignSpark to share ideas, ask questions, read articles, enter competitions, and employ free tools and models to help them design products.

“Through DesignSpark we can communicate to a community of over 580,000 member engineers from around the world”

ON Semiconductor is a sponsor of DesignSpark and contributes to the community, which increases the brand's visibility online and helps the company acquire potential customers. Eamonn Ahearne,

Global Account Manager at ON Semiconductor, said, "Through DesignSpark we can communicate to a community of over 580,000 member engineers from around the world, and provide tools and ideas enabling them to develop innovative solutions quickly and efficiently." Liu states that, "DesignSpark is the unique competitive advantage of RS when compared with other similar distributors."

### Proactive support

The RS team is proactive, often providing suggestions of which new ON Semiconductor products should be selected for promotion and distribution based on the team's understanding of customer needs in Asia Pacific markets. Liu said, "We are very happy that RS is able to provide suggestions for us to take into consideration, rather than just waiting for ON Semiconductor to provide the team with instructions."

She also believes the RS team has strong experience and technical expertise, which makes them an ideal partner for the company.



### The Internet of Things (IoT)

ON Semiconductor is investing heavily in producing innovative IoT products and solutions. According to TL Peng, Field Application Manager, ASIA Distribution, "The growing importance of smart IoT technologies, such as smart cities, smart manufacturing or smart cars, is making IoT adoption a global megatrend." Furthermore, he believes that IoT is gaining great traction in Asia, especially with key markets focusing on smart technologies. Peng's observation is supported by data from the IDC, which recently reported that the Asia Pacific region (excluding Japan) is poised to be the frontrunner in IoT investment in the world, with IoT spending in the region expected to reach \$455 billion by 2021.

**The growing importance of smart IoT technologies, such as smart cities, smart manufacturing or smart cars, is making IoT adoption a global megatrend.**

As ON Semiconductor develops IoT products, including IoT sensors and development kits, it will rely on RS for distribution. Peng believes that RS can certainly enhance the breadth and depth of ON Semiconductor's IoT product penetration in markets where IoT demand is at its peak, such as China, due to RS' robust distribution networks and innovative vision.

### Deepening ties in the future

Given the success of the partnership so far, ON Semiconductor is seeking to further deepen its collaboration with RS in the future. Liu expects the partnership to move beyond distributing individual parts and components, to distributing whole solutions.

"At ON Semiconductor we do not only produce individual parts, but also comprehensive end-to-end proprietary solutions," she said. "In the future, we're hoping to work more closely with RS to market our solutions, and bring more innovative solutions and ideas to our customers in the region."



FOR THE SMARTEST WAY TO CONNECT ANYTHING TO EVERYTHING,



We offer the largest portfolio of IoT solutions.

Our complete IoT solutions make designing and deploying connected devices for homes, and buildings as simple and intuitive as possible. So no matter how you want to connect your smart device, Think ON.

For cutting-edge solutions, design tools, and resources visit [onsemi.com/loT](http://onsemi.com/loT)

ON Semiconductor®





## INTEL® MOVIDIUS™ NEURAL COMPUTE STICK?

Accelerate Deep Learning at the Edge

### What can you do with the Intel® Movidius™ Neural Compute Stick?

The Intel® Movidius™ Neural Compute Stick (NCS) is a tiny fanless deep learning device that you can use to learn AI programming at the edge. NCS is powered by the same low power high performance Movidius™ Vision Processing Unit (VPU) that can be found in millions of smart security cameras, gesture controlled drones, industrial machine vision equipment, and more.

### What can you do with the Intel® Movidius™ Neural Compute Stick?

The Intel® Movidius™ Neural Compute Stick enables rapid prototyping, validation and deployment of Deep Neural Network (DNN) inference applications at the edge. Its low-power VPU architecture enables an entirely new segment of AI applications that aren't reliant on a connection to the cloud.

The NCS combined with Intel® Movidius™ Neural Compute SDK allows developers to profile, tune, and deploy Caffe or Tensorflow™ trained Convolutional Neural Network (CNN) on low-power applications that require real-time inferencing.

[developer.movidius.com](http://developer.movidius.com)

### Movidius Neural Network Compute Stick

- Movidius 600MHz Myriad-2 SoC with 12 x 128-bit VLIW SHAVE vector processors
- 2MB of 400Gbps transfer-rate on-chip memory
- Supports FP16, FP32 and integer operations with 8-, 16- and 32-bit accuracy
- All data and power provided over a single USB 3.0 port on a host PC
- Real-time, on-device inference without Cloud connectivity



139-3655

MPN: NCSM2450.DK

### Joule 570x Developer Kit with Expansion Board

- A development platform for the Intel® Joule™ 570x modx
- Intel's high performing compute module and graphics with large memory and multiple high-speed interfaces in a low-power package
- By using the expansion board with the Intel® Joule™ 570x module, the I/O connections are made easier
- Applications areas include: Computer Vision, Mobile Robotics, Drones, Industrial Machine Vision and IoT/Demanding Edge Computing



123-9801

MPN: GT.PDKW

### Edison Board for Arduino

- A System-on-Chip (SoC) development platform enabling inventors and consumer product designers to develop 'Internet of Things' (IoT) and wearable computing products
- Features headers for Arduino Rev3 compatible Shields
- Dual-core, dual-threaded 500 MHz Intel Atom CPU and 100 MHz Intel Quark microcontroller
- On-board 1 GB LPDDR3 POP SDRAM (Dual channel 32-bit @ 800MT/sec)
- On-board 4 GB eMMC Flash memory



833-0895

MPN: EDI2ARDUIN.ALK

### Genuino 101 Board powered by Intel

- Powered by the Intel® Curie™ microcontroller
- 32-bit Intel® Quark™ microcontroller
- 384 kB flash memory
- 80 kB SRAM
- DSP sensor hub
- 6-axis combo sensor with accelerometer and gyroscope to support mobile usage
- Bluetooth connectivity (GAP, GATT, DIS)
- Compatible with Windows, MAC OS and Linux
- Real-time RTOS operating system with continuous Intel development
- Access to Arduino IDE for development support



913-9999

MPN: Genuino 101

### RealSense™ Image Sensor Development Kit for R200 Camera

- A small, light-weight USB-powered camera that has a depth sensor and an RGB sensor
- Easy to set up and also gives portability when used with either the Intel® RealSense™ SDK or the Intel® RealSense™ Cross Platform API
- Software developers can create the next generation of natural, immersive and innovative software



134-0406

MPN: 82634DSB2P

134-0405

MPN: 825351VCQSPL04N

### Intel Solid State Drive 600p Series

- Delivers power efficiency, a small form factor for system flexibility, and 17x better performance
- Fast PCIe 3 x4 interface and is part of the Intel 3D NAND SSD family of products
- Intel 3D NAND SSD
- Single sided for design flexibility
- M.2 (80 mm) form factor
- Low power consumption
- AES 256-bit self-encryption



125-7978

MPN: SSDPEKKW256G7X1

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!



### Raspberry Pi 3 Starter Kit

- Raspberry Pi 3 B Computer Board
- Micro-SD card with operating system - New Out Of Box Software (NOOBS)
- Official Raspberry Pi Red & White Case
- Official Raspberry Pi USB Keyboard
- Official Raspberry Pi USB Mouse
- Official Raspberry Pi HDMI Cable
- Official Raspberry Pi USB Power Supply



896-8119 MPN: Raspberry Pi 3 Starter Kit

### pi-top Modular Laptop inc Inventors Kit

- pi-top PROTO+ prototyping board
- LED lights
- Ultrasonic range sensor
- Buzzer
- Noise sensing microphone
- Various cables, wires, resistors, buttons and sensors



146-9335 MPN: PTIUGR200001

### Raspberry Pi 3 Model B SBC

- Perfect for your Internet of Things (IoT) designs
- Broadcom BCM2837 chipset running at 1.2 GHz
- 64-bit quad-core ARM Cortex-A53
- 802.11 b/g/n Wireless LAN
- Bluetooth 4.1 (Classic & Low Energy)
- Dual core Videocore IV<sup>®</sup> Multimedia co-processor
- 1 GB LPDDR2 memory
- Supports all the latest ARM GNU/Linux distributions and Windows 10 IoT



122-5826 MPN: Raspberry Pi 3 Model B\_Single

### Bare Conductive Touch Board Starter Kit

- Touch board with on-board ATmega32u4 microcontroller
- Electric paint 10 ml tube
- Electric paint 50 ml jar
- Guidebook
- MicroSD card
- MicroSD card reader
- Micro USB cable
- Mini speaker
- 12 x alligator clips



896-8115 MPN: SKU-5228

### Arduino Starter Kit with UNO board

- Use the Arduino Uno as a main board, with the board featuring an AVR ATmega 328 microcontroller
- Available in 5 language versions
- Primarily an educational tool for newcomers to Arduino and electronics, the starter kits are also suitable for the experienced designer
- Using the included Arduino Projects Book, you can gain step-by-step knowledge on code, circuits and bread-boards via 15 suggested projects



761-7355 MPN: K000007

### MINIPRO-TL866A EEPROM/FLASH Programmer

- A universal programmer designed for use with over 13000 devices including: EPROMs, EEPROMs, SPI FLASHs, DataFlash and MCUs
- A Fast SPI algorithm mode enables the MINIPRO-TL866A to provide fast programming
- Simply connect the MINIPRO-TL866A to a PC via a USB port
- No need for an external power supply
- The components are attached directly to the ZIF40 socket or through the HE10 connector (ICSP cable provided)



919-5501 MPN: MINIPRO-TL866A

### Tinkerkit Braccio Arduino Robotic Arm

- A fully operational robotic arm, controlled using an Arduino Board
- Designed for desktop use and is supplied in kit form so you can assemble it to your own requirements.
- Maximum operating distance: 80 cm
- Maximum Height: 52 cm
- Base Width: 14 cm
- Gripper Width: 9 cm
- Cable Length: 40 cm



111-3738 MPN: T050000

### Arduino Robot with ATmega32u4

- Made to be flexible for all levels of experience
- Consists of two boards: a control board (with a variety of on-board sensors) — ideal for beginners to programming, and a motor board — for the more experienced programmer. Each board features an AVR ATmega 32u4 microcontroller
- Can be powered using a USB connection or 4 AA batteries



782-4581 MPN: A009078

### Curiosity PIC24F Development Board

- 16-bit development platform targeted at first-time users, makers, and those seeking a feature-rich rapid prototyping board
- Featured has an integrated cryptographic engine
- 32MHz PIC24FJ128GA204 16-bit XLP microcontroller with 128KB Flash memory, 8KB RAM
- On-chip hardware Cryptographic engine for data encryption/decryption and authentication



125-9529 MPN: DM240004

### Arduino Uno Development Boards, Revision 3

- ATmega 16U2 programmed as a USB to serial converter
- 14 digital I/O pins (6 can be used as Pulse Width Modulation (PWM) Outputs)
- 6 analogue inputs
- 16 MHz ceramic resonator
- USB connection
- Power jack
- ICSP header
- Reset button



715-4081 For DIP package types MPN: A000066

769-7409 For SMD package types MPN: A000073

847-4897 With long pins for DIP package types MPN: A000099

### BeagleBone Black Single-Board Computers

- An open-source, Linux-based Single-Board Computer
- It is supplied with Debian Linux OS pre-installed and is capable of operating stand-alone or in conjunction with a host PC



125-2411 Revision C MPN: BeagleBone Black

125-2412 Wireless MPN: BeagleBone Black Wireless

### Pycom IoT Bluetooth Smart (BLE), WiFi Development Boards

- A MicroPython enabled WiFi and Bluetooth development board designed specifically for IoT applications
- At its heart is the Espressif ESP32 System on Chip (SoC) featuring a dual core microcontroller, WiFi, Bluetooth and 512 KB RAM



125-9532 (BLE), LoRa, WiFi MPN: LoPy

125-9531 (BLE), WiFi MPN: WiPy 2.0

# If something this big can be built using our products Imagine what you could do?

**Towering hundreds of feet into the air, offshore and onshore wind farms are huge constructions which generate ample amounts of renewable energy.**

Systems such as these are built from a breadth of products and components – and at RS, they can all be found in one place. This infographic illustrates some of the essential parts we provide which go into creating these complex structures.

## CONTROL ROOM

- Industrial Monitors
- RF and Coax Cables
- Interface ICs
- Display Drivers
- Power Management ICs
- Microcontrollers
- RF ICs
- Industrial Push Button Switches
- Cables and Wires
- Programmable Logic Controller & Human Machine Interfaces
- Data Logging
- Electrical Testing

## WIND TURBINE

- Batteries
- High Power Thyristors
- Surge Protection
- Isolated Gate Drivers & Insulated Gate Bipolar Transistors
- Microcontrollers
- High Voltage Resistors
- Capacitors
- Inductors
- Contactors
- Mechanical Components
- Power Connectors
- Communication ICs
- Relays
- PCB Connectors
- Terminal Blocks
- Optocouplers
- Data Convertors
- Sensors
- MOSFETs
- Fasteners and Fixings

## CRANE

- Fluid Control Systems
- Hydraulics
- Pneumatics
- Sensors and Transducers
- Control & Switchgear
- Inverters & Servo Drives
- Motors
- Lubricants
- Power Management
- Fasteners and Fixings

## BOAT

- Sensors
- Emergency Lighting
- Fasteners and Fixings
- Contactors
- Pressure Measurement
- Fluid Control
- Industrial Switches
- Power Transmission Coupling
- Relays
- Panel Meters
- Solenoids
- Fuses and Circuit Breakers

YOUR HOME OF ENGINEERING



## SC 16-3 Series Dust Caps

- Protective caps for C 16-3 circular connectors in shell sizes 2
- Supplied with nylon cord for attachment to assembly
- Cable and chassis mount inserts may be keyed to prevent incorrect connection between types
- Pre-mating earth design
- Supplied with strain relief and PG cable gland for conduit fixing



## Amphenol

<b>329-9310</b>	Socket	MPN: C016-00V000-0102
<b>240-8529</b>	Plug	MPN: C016-00U000-0002

## CA Series, 4 Pole Cable Mount Connectors IP67

- Screw locking connectors
- Coarse thread for quick latch and disconnect
- Cable clamping range 6 - 12mm
- Overall body length 61mm
- Easy assembly construction



<b>359-4384</b>	Plug, Male Contacts	MPN: 934124100
<b>359-4390</b>	Socket, Female Contacts	MPN: 934125100

## 222 Series Terminal Block

- Connection of up to three stripped fine stranded conductors up to 2.5 mm<sup>2</sup>
- The integrated orange lever acts as a sturdy clamp when in the rest position
- 3 Way/Pole, Spring Terminals, 28 → 12 AWG, Polyamide, 600 V



<b>475-1437</b>	32A	MPN: 222-413
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## DT15 Series Connectors, PCB Headers

- 2 Row, Straight PCB Header, Solder Termination
- Environmentally sealed connector
- Rugged thermoplastic connector housing
- Operating temp range -55 to +125 °C
- Moulded in solid copper alloy contacts



<b>724-2539</b>	4,4mm Pitch, 6 Way	MPN: DT15-6P
<b>724-2541</b>	5,46mm Pitch, 8 Way	MPN: DT15-8P
<b>724-2554</b>	4,44mm Pitch, 12 Way	MPN: DT15-12P

## Buccaneer Series, 5 Pole Cable Mount Connectors

- Water and dustproof
- Leading earth pin
- Scoop proof contacts
- Easy assembly, no special tooling required
- Field serviceable, screw termination



<b>344-4021</b>	5 Pole, Plug	MPN: PX0911/05/P
<b>344-3999</b>	3 Pole, Plug	MPN: PX0911/03/P
<b>344-4065</b>	5 Pole, Socket	MPN: PX0911/05/S

## Buccaneer Series, 3 Pole Cable Mount Connectors

- For making in-line waterproof connections
- The in-line plug will only mate with the cable socket and in-line socket will only mate with the cable plug
- Diameter 38mm
- Length 65mm



<b>489-403</b>	Plug	MPN: PX0732/P
<b>483-938</b>	Socket	MPN: PX0732/S

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!

### Mini-Fit Junior 4.2mm Crimp Receptacle and Plug Housings

- 4.2mm Pitch 2 Way 2 Row Female Straight Crimp Connector Housing
- Can handle Up to 9A current per circuit
- Fully isolated terminals
- Polarization and keying to prevent mismatching
- Positive locking mechanism for secure mating connection



**molex**

**484-1748** 4.2 mm

MPN: 39-01-2020

### Pro-Crimper III Series, Crimp Die Set

- Crimp Die Set
- Universal MATE-N-LOK
- Wire size 20 → 14 AWG
- Precision designed and manufactured
- Available for use with a variety of crimp terminal types



**849-120** 20 → 14 AWG

MPN: 90546-2

### 5.08mm Pitch PCB Terminal Block

- Classic COMBICON MSTB 2,5 5.08 mm pitch plug-in cable mount terminal block connectors
- Feature a 0.2 mm<sup>2</sup> to 2.5 mm<sup>2</sup> screw connection that forms a standard plug-in system for 320 V (III/2)
- Screw connection



**189-6026** 5.08mm Pitch

MPN: 1757022

### Micro-Fit 3.0 43025 series Female Straight Crimp Connector Housing

- Form part of a unique compact and high density low to mid-range power connector system that can carry up to 5.0A of current
- Feature positive locking for a secure connection and are fully polarized to prevent mismatching



**molex**

**233-2747** 2 way

MPN: 43025-0200

**233-2753** 4 way

MPN: 43025-0400

**233-2769** 6 way

MPN: 43025-0600

### AMP-LATCH Novo Series IDC Connector

- AMP-LATCH Novo wire to board IDC ribbon cable connectors with centre and military polarized centres and a 2.54 × 2.54 mating grid for 1.27mm pitch ribbon cable
- 2.54mm Pitch, Right Angle Cable Mount



**454-2429** Socket, 40 Way, 2 Row

MPN: 1658621-9

### Datamate L-Tek Cable Socket Connector Kits

- DIL Female Shell, Crimps
- Polarised mouldings
- High reliability connector system
- Available with or without latches
- Suited for COTS applications



**HARWIN**

**511-721** 16 way

MPN: M80-8881605

**511-711** 10 way

MPN: M80-8881005

**511-727** 12 way

MPN: M80-8881205

### PZ 6/5 Bootlace Ferrule Tool Kit

- 3100 assorted bootlace ferrules from 0.5 to 6mm<sup>2</sup>
- Convenient storage compartments
- Handles for portability
- Crimping and stripping tools included



**Weidmüller**

**425-8770** Plastic assorted colour coded

MPN: CRIMP-SET PZ 6/5 -9028740000

### Scotchlok® Crimping Tool

- 10-to-1 mechanical advantage
- Crimps butt and tap connectors in all wire gauge sizes
- Reduces fatigue and enhances user productivity with an ergonomic design



**837-6970** Crimp Tool Scotchlok

MPN: E-9J

### Ratchet Crimping Tool, KK Crimp Terminals

- Minimum 30AWG, Maximum 22AWG
- 2 to 15 way versions on 0.1in. pitch
- IDT sockets incorporate high pressure contacts which are ideal for daisy-chain or high vibration applications
- Straight friction locks help prevent accidental disconnection
- PCB sockets with fitted contacts have positive cantilever wipe action



**molex**

**663-4246** Overall Length 197mm

MPN: 63811-b200

### Ferrule Kits - PZ6 Kits

- For cutting, stripping and crimping ferrules up to 6mm<sup>2</sup>, dependent on kit
- The kits contain ferrules and corresponding crimp and Stripax® cutting tools



**Weidmüller**

**425-8742** Weidmuller Ferrule Kit, 1 piece

MPN: CRIMP-SET PZ 6 ROTO L-9028680000

### Knipex Crimping Tool, Bootlace Ferrule

- Self-adjusting wire end ferrule tool with side entry
- Adjusts automatically to different cable cross-sections
- Produces a hexagonal crimp profile
- Optimum positioning of contact surfaces in the clamp connection for confined connection dimensions



**336-8179** 28 → 7 AWG

MPN: 97 53 04

**336-8078** 28 → 10 AWG

MPN: 97 53 14

### Klauke Crimp Terminal Kit

- Contains a total of 280 tubular ring terminals incorporating 12 of the most popular sizes
- The K05 crimp tool is also included which has revolving hexagonal dies suitable for the various cross-sections required for crimping
- Supplied in a robust steel carry case with lock and carrying handle, and is perfect for on-the-go application



**Klauke**

**398-2264** Tubular Ring Terminal

MPN: SK65B



### Enclosed Variable Transformer

- A robust range of enclosed style variable transformers for surface floor or wall mounting
- Single or three phase versions available in a range of current ratings
- Continuously variable AC output voltage with overvoltage tap
- Heavy duty construction
- High efficiency & excellent regulation



**890-2850** 3 Phase 8.14kVA Variac

**890-2819** 1 Phase 2.4kVA Variac

**890-2806** 1 Phase 1.2kVA Variac

### Isolating Transformers

- 230 V ac, 245 V ac, 400 V ac, 415 V ac Primary 1 x, ±55V ac Secondary
- Low loss noise laminations
- Dual standard primary winding 230 / 400Vac with +15V tap for input flexibility
- Dual secondaries are centre tapped



**504-218** 500VA, ±55Vac

**504-228** 500VA, 230Vac

**504-234** 1kVA, 230Vac

### 15-Turn Potentiometer Knobs

- Choice of satin chrome with black markings or black chrome with white markings
- Large visual display
- High quality precision mechanism
- Locking lever for fixed position



**107-3138** Silver Body MPN: 21A11B10

**811-147** Black Body MPN: 21A21B10

**104-161** Chrome Body MPN: 21B11B10

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!

### 10-Turn 534 Series Panel Mount Potentiometers

- Precision 10 turn wirewound potentiometers
- Stainless steel end slotted shaft
- Available with either Imperial (1/4in) or Metric (6mm) shaft
- Glass filled thermoplastic housing
- Supplied with metal lockwasher and nut
- Gold plated terminals



**486-7093** 6 mm Dia. Shaft

MPN: 534B1103.JC8872

**460-7526** 6.35 mm Dia. Shaft

MPN: 534B1103.JL

### Aluminium Electrolytic Converter

- Industrial grade
- Long life, high performance electrolytic capacitors
- High CV value with low equivalent series resistance (ESR), and low equivalent series inductance (ESL)



**189-793** Capacitance: 22000 µF

MPN: PEH200MJ5220MU2

### Aluminium Electrolytic Capacitors

- Screw Terminal B41456 Series, -40°C to +85°C
- Aluminium case with insulating PVC sleeve
- Mounting with threaded stud, ring clips or clamps
- Poles with screw terminal connections



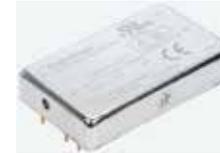
**255-0254** 68000µF 63V dc 76.9mm MPN: B41456B8689M

**255-0248** 22000µF 63V dc 51.6mm MPN: B41456B8229M



### 30W Single/Dual Output Regulated Isolated DC-DC Converter

- Vin 18 → 75 V dc, I/O isolation 1.5kV dc, Vout 12V dc
- 50.8×30.5×8.9 mm metal package (2.0×1.2 inch)
- Ultra-wide 4:1 input voltage range (except ±24V)
- Very high efficiency up to 88%



**248-439** Through Hole mounting

MPN: ESC36120-S-1IP

### Global Power Plug Top Power Adapter - GPP6, Standard Version

- 5 × interchangeable primary adapters; Euro, UK, USA/Japan, Australia, IEC
- 7 × interchangeable output connectors
- Constant voltage, current limited
- Low standby power of ≤ 0.3 W
- Low leakage current of ≤ 10 µA
- Continuously short circuit proof



**736-1624** 12V dc, 500mA Level V 1 Output

MPN: EDV1891664RS

### 96W Fixed Installation Car Power Adapter

- Wide input voltage range
- Regulated output
- Input protected against reverse polarity
- Input fuse protection
- Output overvoltage protection
- EMC to EN50081-1/50082-1
- 12Vdc and 24Vdc input types are 'E' approved for vehicle applications



**452-8603** 10→16V dc / 24V

MPN: 8660000048

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!

### 100W AC-DC Converter

- 8.3A, 12V dc Medical Approved
- 100 W open frame, AC-DC power supplies
- 80-85% Efficiency
- IT and medically approved
- Class I and Class II construction



**122-7046** Operating temp: 0 °C to +70 °C

MPN: ECM100US12

### Switch Mode DIN Rail Panel Mount Power Supply

- Universal AC input/full range
- Protections: Short circuit/Overload/Over voltage/Over temperature
- Cooling by free air convection
- Can be installed on DIN Rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved



**282-473** 48W, 24V dc/ 2A

### Desktop Power Supply

- 120→370 V dc, 85→264 V ac, 24V dc 5A Output Level V 1 Output
- Energy saving, class 1, switch mode, desktop power supply
- High efficiency, long life and high reliability
- ErP level V, step 2 compliant
- No load power consumption<0.5W



**721-2297** 3 pole IEC320-C14 AC inlet

MPN: GS120A24-R7B

# The Rise of Mechatronics

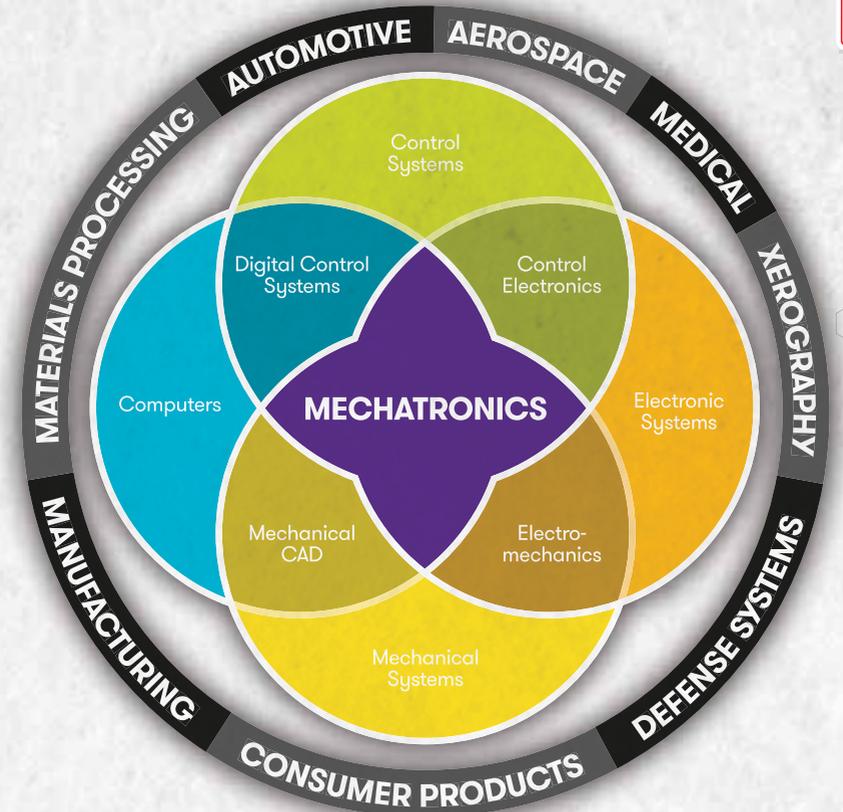
**Mechatronics merges concepts from computer science with mechanical, electrical and control engineering in order to design, build and operate products. It's currently applied in everyday life for solutions in transport, optical telecommunication and biomedical engineering, to name a few.**

The term 'mechatronics' was first coined in 1969 by Tetsuro Mori, an engineer at robotics company Yaskawa Electric Corporation.

It's a combination of the terms mechanical and electronics.

In order to compete successfully in a global market, modern manufacturing companies must have the ability to integrate electronics, control, software and mechanical engineering into a range of innovative products and systems.

That's where we can help. As your home of engineering, we have all the products you need, from all the industry's leading brands.



## Process & Control



## Electronics



## Mechanical



## Robotics





## Relay Technology <sup>12</sup>

Designed by PHOENIX CONTACT

# Nobody manufactures 6 mm safety relays. Until now.

### Maximum performance – minimum size

With the PSRmini product range, Phoenix Contact is bringing to the market the most narrow safety relays in the world. At widths of just 6 mm and 12 mm, they provide maximum functional safety through force-guided contacts according to the standard EN 50205. The highly-compact design means space savings of up to 70 %. This is possible thanks to the newly developed relay technology from Phoenix Contact with switching loads up to 6 A.

## QUINT POWER Single and Three Phase Power Supplies

- Selective Fusebreaking Technology (CRC Technology)
- Worldwide use through wide-range input for DC and AC networks
- Reliable start difficult loads with static power reserve POWER BOOST
- High reliability through high MTBF > 500,000 h, long power failure bridging times > 20 ms, high voltage to 300 Vac



<b>540-747</b>	24V dc/ 5A	MPN: 2866750
<b>540-769</b>	24V dc/ 10A	MPN: 2866763
<b>540-779</b>	24V dc/ 20A	MPN: 2866776

## UPS Uninterruptible Power Supplies

- Automatic battery detection, tool-free battery replacement during operation, and communication via the IFS interface
- Reliable starting of difficult loads with the static POWER BOOST power reserve with up to 1.5 times the nominal current permanently
- Fast tripping of standard circuit breakers with SFB (selective fuse breaking) technology
- Comprehensive license package and extensive parameterization and diagnostics options



<b>739-7865</b>	130 × 35 × 125mm	MPN: 2320225
<b>751-2585</b>	113 × 54 × 157mm	MPN: 2320296
<b>751-2597</b>	110 × 135 × 202mm	MPN: 2320319

## 4PDT DIN Rail Non-Latching Relays

- Easy wiring due to push in connection technology
- Easy handling and extension of range
- Plug in display/suppressor module
- AC and DC versions
- 2 and 4 contact options
- Yellow LED indicator
- Varistor or damping diode protective circuit



<b>794-3686</b>	24V dc Coil 6 A	MPN: 2903308
<b>794-3670</b>	230V ac Coil 5 A	MPN: 2903304
<b>794-3682</b>	24V ac Coil 16 A	MPN: 2903306

## Device Circuit Breakers

- High system availability, thanks to selective protection
- Reliable protection of your devices – targeted shutdown in the event of an error
- Versatile, thanks to the various trigger mechanisms
- Solutions for many applications, thanks to the comprehensive product range



<b>890-3796</b>	0.5-10A	MPN: 2905743
<b>684-3581</b>	0.5A	MPN: 0916603
<b>684-3608</b>	10A	MPN: 0916610

## Terminal Blocks - Push-in Connection

- Easily connect conductors from 0.25 mm<sup>2</sup> both directly and without the need for tools
- The special contact spring allows easy insertion and guarantees a high level of contact quality
- Time-saving pre-treated and solid conductor connection, thanks to tool-free direct plug-in technology



<b>687-9414</b>	Feed-through	MPN: 3209510
<b>687-9638</b>	Double-level	MPN: 3210567
<b>708-1615</b>	Fuse modular	MPN: 3208943

## Industrial Ethernet Switches

- Automatic detection of data transmission speed of 10 or 100 Mbps (RJ45), autocracking function
- Wide range of media and connections with up to 16 ports (including 3 fiber optic ports)
- High level of immunity to interference, robust metal housing, and wide temperature range



<b>712-4046</b>	5 TP RJ45 ports	MPN: 2891001
<b>712-4049</b>	8 TP RJ45 ports	MPN: 2891002
<b>801-7188</b>	6 TP RJ45 ports	MPN: 2891411



**Limit Switches OsiSense XC Standard**

- Positive opening on all snap and slow-break contacts, for safer machinery
- Modular design for easier maintenance



<b>235-953</b>	Spring return (var length)	MPN: XCKJ10541
<b>235-947</b>	Spring return	MPN: XCKJ10511
<b>235-969</b>	Spring return (round rod)	MPN: XCKJ10559

**SPDT-NO/NC Microswitches, 5 A @ 125 V ac**

- Incorporating simple and stable two split springs which enable a long service life (30,000,000 operations)
- A variety of models with low operating force to high operating force are available
- Solder, quick connect terminals (#110) and PCB terminals are available



<b>682-2660</b>	Roller Lever	MPN: SS-5GL2
<b>682-0866</b>	Hinge Lever	MPN: SS-5GL

**Start/Stop, I/O Double/Triple Switches**

- Green and red 22mm diameter, spring return double insulated bezel push buttons
- Stop button fitted with 1 N/C contact block, start button fitted with 1 N/O contact
- I/O with red LED pilot light available
- 'STOP' 'START' version has marking on legend holder and legend below head
- Double insulated
- IP65 rated



<b>330-8509</b>	Flush pushbuttons	MPN: XALD213
<b>299-398</b>	Projecting pushbuttons	MPN: XALD214

**XB4 Complete Control Buttons**

- Flush complete pushbutton Ø22 spring return 1NC "unmarked"
- NO Spring Return



<b>330-8638</b>	Green	MPN: XB4BA31
<b>330-8644</b>	Red	MPN: XB4BA42

**Illuminated DPST, On-Off Rocker Switch Panels**

- Spade terminals 6.3 mm x 0.8 mm
- Panel cutout 30 x 22.1mm
- Contact Material: Silver Alloy
- Contact Configuration: DPST



<b>129-426</b>	Red	MPN: C1353ALGNB
<b>129-432</b>	Green	MPN: C1353ALGNC

**Reed Switches**

- Pre-wired with 0.7m PVC leads
- Blue cast zinc case with slotted fixing
- Breakdown volts: 340ac/500dc
- Rating IP64
- Dimensions: 80 x 19 x 9.6mm (switch) 38 x 25 x 9.6mm (magnet)



<b>339-746</b>	Rectangular 250V, NO, 3 A
<b>339-752</b>	Flat 400V, Changeover, 2 A



**SPDT-NO/NC Momentary Push Button Switches, Panel Mount**

- Able to survive an impact of a 5kg mass dropped from 40cm [20J] and are panel sealed to IP67
- The bezels and actuators have also been designed from non-sparking zinc alloy
- Large circular style suitable for applications where a large actuation area is required and is available in momentary and 'pull-to-reset' latching versions
- Silver contacts



<b>280-6377</b>	Black	MPN: 76-9440/439088B
<b>280-6361</b>	Green	MPN: 76-9440/439088G

**Piezo Actuated Switches**

- Especially suitable for outdoor, low-supervision security applications
- Operate over a wide temperature range and are resistant to oils and many chemicals
- Available in two sizes, 18mm and 25mm and in a variety of colours
- Operating Temperature Range: -40 → +105°C



<b>665-641</b>	Silver, IP68	MPN: TH702100129
<b>665-629</b>	Green, IP67	MPN: TH732102000

**DPDT PCB Mount Non-Latching Relays**

- 8mm, 6kV insulation coil to contact
- Flux proof: RT II
- Dimensions: H25, W29, D12.4mm



<b>351-572</b>	12V dc Coil 8 A	MPN: 40.52.7012.0000
<b>351-588</b>	24V dc Coil 8 A	MPN: 40.52.7024.0000

**Anti-vandal Momentary Pushbutton Switches**

- Compact and extremely robust, featuring an anti-jamming, impact-resistant construction
- Sealed to IP65 and with a stainless steel bushing and actuator
- Switch Operation: Momentary



<b>223-717</b>	SPDT-NO/NC	MPN: AV19LP40904
<b>225-599</b>	SPST-NO	MPN: AV0630C940K

**Toggle Switches IP67**

- 20 A @ 250 V ac, Panel Mount
- With silver plated contacts sealed to prevent the ingress of dust or liquids
- Connection via 250in. (¼in.) receptacles or soldering
- For biased operation 'on' refers to momentary on position
- Brass actuator and Glass Filled Polyester case



<b>317-437</b>	DPDT On-On	MPN: AWTN1504
<b>317-421</b>	SPDT On-On	MPN: AWTDI1504
<b>317-853</b>	DPDT (On)-Off-On	MPN: AWTI1504

**Heavy-duty Type (a) Microswitches**

- Connection by screw and cup washer
- Panel mounting types should be bush mounted using the supplied fixing nuts
- The collapsible roller version operates in one direction
- Optional terminal cover has knockouts to provide a choice of wiring positions
- Contact Rating; 15A @ 480Vac/28Vdc



<b>334-404</b>	Short Roller Lever	MPN: BZ-2RW822-A2
<b>338-298</b>	Lever	MPN: BZ-2RW80-A2
<b>338-282</b>	Roller Lever	MPN: BZ-2RW82-A2



**Tesys D LC1D 3 Pole Contactor**

- Built-in coil suppression
- 3 N/O poles
- Auxiliary contact configuration one N/O, one N/C
- Operating time closing 12 to 22 ms
- Operating time opening 4 to 19 ms



**394-9807** 24 Vdc MPN: LC1D09BD  
**187-920** 240 Vac MPN: LC1D09U7

**1P Impulse Relay with NO Contacts**

- Closing of the impulse relay pole is triggered by an impulse on the coil
- Having two stable mechanical positions, the pole will be opened by the next impulse
- Can be controlled by an unlimited number of pushbuttons
- Zero energy consumption



**791-3045** 16 A MPN: A9C30111

**RM17 TG Series 3-Phase Supply Control Relay**

- Monitoring the correct sequencing of phases L1, L2, and L3 and the total loss of one or more of each phase
- Monitor their own power supply
- LED output status
- DIN rail



**146-238** 208 → 440 V ac MPN: RM17TG20

**RM35 TF Multi-function 3-phase Network Control Relay**

- Checks its own power supply
- Clear hinged front cover
- Potentiometer selects voltages between phases
- LED display of output status
- DIN Rail mounting



**146-480** 220 → 480 V ac MPN: RM35TF30

**A Series AC Controlled Contactors**

- Built-in surge protection and do not require additional surge suppressors
- Manage large control voltage variations
- One coil can be used for different control voltages, and used worldwide without any coil change



**445-0910** 3NQ, 230 → 240 Vac MPN: 1SBL141001R8810  
**711-6206** 4NQ, 100 → 250 Vac/dc MPN: 1SBL137201R1300

**Contactors - 3RT10 Range**

- Provide excellent reliability and are of extremely good quality
- Various NO/NC models available
- Maximum switching voltage 690V
- Mechanical life 3 × 10<sup>7</sup> operations



**243-6631** 9 A (AC3), 4 kW (AC3) MPN: 3RT10161BB41  
**392-7380** 12 A (AC3), 5.5 kW (AC3) MPN: 3RT10171BB41



**Multi Function Timer Relay**

- 7 selectable functions
- 7 selectable time ranges
- Fine adjustment of selected time range
- LED warning indication if function is changed whilst powered
- Screw, 0.1 s → 100 h, SPDT, 1 Contacts, SPDT, 12 → 230 V ac/dc



**828-5158** SPDT, 12 → 230 Vac/dc MPN: LMMT 12-230V AC/DC

**Delay Single Timer Relay**

- Supply initiated Delay On Operate timing function
- 7 selectable time ranges
- Fine adjustment of selected time range
- Multi-voltage input
- Screw, 0.1 s → 100 h, SPDT, 1 Contacts, SPDT, 12 → 230 V ac/dc



**828-5161** Delay On Release MPN: LESW 12-230V AC/DC  
**828-5155** Delay On Operate MPN: LEDO 12-230V AC/DC

**Threaded Barrel Block Body Sensor**

- 12 mm Detection Range, Barrel 77mm length
- Predamping protection through self compensation
- Factor1 sensing ability for all metals
- Immune to magnetic interference



**794-8671** IP68 MPN: NI12U-EG18SK-AN6X

**PNP Inductive Sensor**

- 15 mm Detection Range, Barrel 62mm length
- High impact and thermal resistance
- Extended sensing ranges
- Sense all metals at the same distance - with no reduction factor
- IP67 rating (Barrel is IP68)
- High switching frequency



**227-208** IP68 MPN: BI15U-M30-AP6X-H1141

**PNP Inductive Sensor**

- 8 mm Detection Range, Barrel 70mm length
- Optalloy plated brass housing
- Four switching status LEDs
- A setting LED to indicate optimum sensing range



**335-6227** IP68 MPN: IG5953

**M12 4-Position with Socket**

- For sensors with M12 plug connection
- Silicon-free
- Gold-plated contacts
- Suitable for hygiene and wet areas in the food industry



**488-009** 5m Socket MPN: EVT004  
**554-655** 10m Socket MPN: EVT002

**Multi Function Timer Relays**

- 0.05 s → 300 h, 2 Contacts, DPDT
- LED indication of power and contact status



**OMRON**

**328-358** 8-Pin Connector MPN: H3CR-A8 AC100-240/DC100-125

**113-8134** 11-Pin Connector MPN: H3CR-A AC100-240/DC100-125

**Dual Counter & Indicator Meter CUB 5**

- Count speeds up to 20kHz
- Programmable scaling for count/rate
- Bi-directional counting, up/down control
- Flexible input configurations
- Anti-coincidence counting (add/add & add/sub)



**red ipon**

**492-7319** 8 Digit, LCD

MPN: CUB5B000

**NO/NC Inductive Proximity Sensor**

- 40 mm Detection Range
- Block 118mm length
- DIN 'limit switch' style PBT housing and sensing face
- Connections via terminal compartment
- Operating temperature range -25 → +70°C



**PEPPERL+FUCHS**

**124-0307** Thread Size: M20 × 1.5

MPN: NBN40-UI-UU

**PNP Inductive Sensors**

- 5 mm Detection Range
- Nickel plated brass housing with PBT face
- LED indication
- Embeddable, IP67
- Supply voltage 10 to 30Vdc



**PEPPERL+FUCHS**

**249-2265** Barrel 50mm length

MPN: NBB5-18GM50-E2

**249-2366** Barrel 65mm length

MPN: NBB5-18GM50-E2-V1

**Retro-reflective Photoelectric Sensor**

- 0.01 → 15 m Detection Range Relay
- Glass reinforced plastic housing rated to IP67 with status indicator
- Relay outputs (ac./dc units), with ON and OFF delay or no delay
- Light or dark selectable output (diffuse scan versions)
- Adjustable sensing range



**SICK**

**358-7926** IP67

MPN: WL260-R270

**Ultrasonic Proximity Sensors**

- PNP, 5-Pin M12 Connector IP67
- High accuracy distance measurement on analogue type
- Independent of material shape (including films, glass and bottles)
- Teach-in
- Digital or analogue output



**SICK**

**700-2854** 60 → 350 mm

MPN: UM30-21211

**700-2889** 200 → 1300 mm

MPN: UM30-213112



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### Refrigeration Digital Electronic Thermostat

- Easy programming of Regulator, Compressor, Defrost & Alarm settings
- Single or dual NTC probe input
- IP65 front panel
- Ambient temperature range: 0°C to 50°C



CAREL

**511-7440** 76.2 x 34.2mm, NTC Input MPN: IR33S0LR00

### PID Temperature Controller

- Withstand voltage 2000V coil to contact
- Arc barriers to prevent flash-over between adjacent poles
- Relay clips for DIN types available separately
- Contact resistance: 50mΩ
- Isolation coil to contact: 12kV



OMRON

**755-3217** 48 x 48mm MPN: E5CC-RX3A5M-000

### RSAC Inverter Drive 0.75 kW with EMC Filter

- Perfect in situations where a robust and sleek design is necessary
- Can be used in various applications including conveyors, HVAC and pumps



**136-3108** 1-Phase In MPN:

**136-3124** 3-Phase In, [Food Grade] MPN: RSDA42WF

### S7-1200 PLC CPU Starter Kit with HMI

- Profibus, Profinet Networking
- Ethernet, USB Interface
- CPU 1212C AC/DC/RLY
- Input simulator
- KTP400 basic
- SIMATIC STEP 7 basic in the TIA portal



SIEMENS

**864-3999** 24 V dc MPN: 6AV66517DA013AA4

### IoT2020 Educational Intelligent Gateway

- Programming in high-level languages
- Intel Quark x1000 (Galileo)
- 512 MB RAM
- microSD Card slot
- 1 Ethernet Interface
- Yocto Linux support
- LEDs



SIEMENS

**124-4037** CPU: Intel Quark x1000 [x86 400 MHz] MPN: 6ES7647-0AA00-0YA2

### AFPOR Series PLC CPU

- Ethernet Networking Computer Interface
- 16 Steps Program Capacity
- Supplied in both relay and transistor output types
- Comes equipped with various I/O configurations in 10, 14, 16 & 32 point options
- 10,000 steps program memory



Panasonic

**815-5397** 8 Inputs, 6 Outputs MPN: AFPORC14RS



### AC Axial Fans

- 150 (Dia.) x 55mm, 390m³/h
- Compact high performance equipment cooling fans
- Housing constructed from diecast aluminium
- Motor stall protection by temperature sensor with automatic reset



ebmpapst

**771-9108** 39W, 230 V ac MPN: W2S130-AA03-01

**457-7324** 47W, 230 V ac MPN: W2S130-BM03-01

**457-7330** 47W, 115 V ac MPN: W2S130-BM15-01

### DC Axial Fans

- Diecast aluminium frame (painted black)
- UL94V-0 thermoplastic impeller
- Brushless motor
- 2 x lead wires (300mm)
- Operating temperature -20°C to +70°C



**619-6753** 1444³/h, 64W

**619-6719** 3995m³/h, 23.28W

### Centrifugal Blower

- 190 (Dia.) x 71.4mm, 735m³/h
- Optimised impeller blade design
- EC motor technology
- High efficiency: up to 50% less energy consumption compared to AC solutions
- Full speed control
- Hybrid construction
- Aerodynamic noise reducing shape



ebmpapst

**830-3023** 230 V ac MPN: R3G190-RC05-03

### TopTherm Fan and Filter Units

- 323 x 323mm, 510m³/h
- Flexible assembly options
- Minimum installation depth
- Even air distribution



**756-9812** 230 V ac, IP54

MPN: SK 3243.100

### Flatpack Fans for alternating current

- 220 x 220 x 56mm, 202m³/h, 230 V ac
- Equipped with a Papst shaded-pole motor and protected by impedance
- Excellent reliability with roller bearings for a long service life
- Applies where axial fans are too low in static pressure
- Return air at an angle of 90°



ebmpapst

**813-569** 230 V ac MPN: RG160-28/56S

### Filter Fans, 320 x 320mm

- Extremely high air flow (highest in the market)
- Reversibility
- Click and fit design
- High filter life
- Fully certified
- 25 design patents
- Colour: RAL 7035 (except Manu Part No suffix "50" : RAL 9011 / Black)



**250-933** 640m³/h, 230 V ac, IP54

MPN: PF66000 11666102055

**667-6745** 945m³/h, 230 V ac, IP55

MPN: PF67000 11667103055



# MIT515

## 5 kV Insulation Resistance Tester

The simplest of Megger's 5 kV insulation resistance testers

- Selectable test voltage from 250 - 5000 V
- Measures up to 10 TΩ
- IR, timed IR, PI and DAR tests
- Max. noise rejection 3 mA
- Short circuit current 3 mA
- CAT IV 600 V safety rating @ 3000 m
- Fast charging lithium-ion battery to meet IEC62133 standards
- Operates from line power/mains if battery is dead
- Guard terminal for more accurate measurement

**Megger**

Power on

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



### TDR1000/3P – Time Domain Reflectometer (TDR)

- Easy to use hand held Time Domain Reflectometer for locating faults on metallic cables
- Ultra fast pulse for near end fault identification
- No power blocking filter required and supplied with fused test leads



764-2825

MPN: TDR1000/3

### DLRO10HD - 10A Micro Ohm Meter

- Rechargeable battery or mains power supply, continuous operation, even with dead battery
- Heavy duty case; IP 65 lid closed, IP54 operational (battery operation only)
- Rotary switch selects one of five test modes, including auto start on connection, giving ease of use



910-6804

MPN: 1006-603

### MIT515 - 5KV Insulation Resistance Tester

- Selectable test voltage from 250 to 5000 V
- Timed IR plus PI and DAR diagnostic tests
- Rapid charge Li-Ion battery with operation from battery or mains supply
- CATIV 600 V safety rating with IP65 Case (Lid closed)



765-9586

MPN: 1001-938

### MIT400/2 - Industrial Insulation and Continuity Tester

- 250/500/1000V Insulation Tester with a large display providing the unique combination of two digital readouts and an analogue arc
- Rubber over moulding provides a tough shock absorbing outer protection with excellent grip, on a strong modified ABS housing, providing an almost indestructible case
- CATIV 600V safety rating with a calibration certificate included



921-4508

MPN: MIT400/2

### PAT150 – Portable Appliance Tester

- Tough, rubber armoured case with built-in front cover, hardened, scratch-proof display window
- Battery powered with simple tick or cross, pass or fail indication plus measurement
- 10mA & 30mA Portable RCD Testing



823-0420

MPN: 1003-077

### MFT1815 Multifunction Installation Tester

- Combined RCD, Insulation, Loop Impedance tester and more for electrical installation testing
- 2 wire & 3 wire non trip loop testing for RCD protected circuits complete with auto start test function
- CATIV safety rating with a tough IP54 case
- Calibration certificate included



901-1321

MPN: MFT1815-AU

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!





### Fluke 435 Power Quality Analyser

- Energy loss calculator: Classic active and reactive power measurements, unbalance and harmonic power
- Troubleshoot real-time: Analyze the trends using the cursors and zoom tools
- Highest safety rating in the industry: 600 V CAT IV/1000 V CAT III rated for use at the service entrance



752-5008

MPN: FLUKE 435-II

### Great value bundle

- ICM139 Clampmeter, RS1327K IR Thermometer & RS9010 Phase Rotation Indicator Bundle
- ICM139R offers high specification performance in a rugged, low-cost unit
- 1327K is a pocket-sized, easy-to-use pistol grip IR thermometer. It enables temperature measurement by Infrared non-contact or by using a plug-in type-K thermocouple probe
- RS9010 is a great value hand held instrument designed to detect the rotary field of 3 phase systems



144-6604

### Time Electronic 1051 Decade Box

- Decade Box Type Resistance, Resistance Resolution 0.01Ω
- For simulating resistance transducers and for laboratory, industrial and educational use
- Required resistance is set by clearly marked thumbwheel switches, colour coded to aid identification



610-297

MPN: 1051

### Fluke 789 Combined Multimeter and Loop Calibrator

- Precision 1000 V, 4+0 mA True RMS digital multimeter
- 0.1% dc voltage accuracy
- 0.05% dc current accuracy
- Frequency measurement to 20 kHz
- Min/Max/Average/Hold/Relative modes



447-7707

MPN: FLUKE-789

### PD690 Voltage Indicator Proving Unit 700V

- Battery powered proving unit, essential for safe use of voltage indicators and test lamps.
- Test voltage indicators with ranges above 240V
- 690V (nominal) @ 0.5mA high output voltage source
- Designed for use with Drummond and other similar lower resistance test lamps, having sufficient output to cause illumination



719-0894

MPN: RSPD690

### FLIR C2 Thermal Imaging Camera

- Temp Range: -10 → +150 °C 80 × 60pixel
- The world' first full-featured, pocket-sized thermal camera designed for building industry experts and contractors
- Lightweight, slim profile fits comfortably in any work pocket
- Equipped to find structural defects, plumbing issues and to find hidden heat patterns that signal energy waste



866-8124

MPN: 72001-0101



### Multi-Purpose Cabinet Key

- 6.5 mm and 8.1 mm square sockets
- 6.4 mm (1/4 in) AF Hex socket
- 9.8 mm triangular socket
- 9 mm winged key drive
- Hex to in square drive adapter
- 7 mm slotted blade
- Pozidriv drive screwdriver bit



439-3025

### 11 pieces Precision Slotted, Phillips Screwdriver Set

- Blade is made of premium quality Black Phosphate for strength
- Set with nickel plated bodies
- Blackened steel shafts
- Revolving heads for precise accurate control



537-883

### 10 Pieces Carbon Steel Metric Combination Spanner Set

- Manufactured from high-quality, carbon steel
- General purpose, twin ended spanner set
- Supplied in compartmental vinyl storage roll



184-8033

### Hard Bottom Zipped Tool Bag

- Constructed from tough, waterproof Polyester
- Top opening with zipper
- Complete with padded shoulder strap
- Removable base board
- Separate multiple pockets



788-7205

### Jet 5000 Tough Case with 2 Tool Boards

- 2 × Removable tool boards with pockets
- Stackable, dustproof & waterproof
- Ergonomic two-component carry handle
- Impact-resistant case made of polypropylene
- Automatic air pressure compensation valve



921-2763

### 9 Piece Hexagon Ball Key Set

- Hex keys permit an entry angle up to 25° to work in hard-to-reach areas
- All hex keys are precision formed to exact dimensional tolerances for precise fit
- Longer length keys for extra leverage and extended reach



668-5773