**ISSUE 48** 1st Jan- 31st Mar 2025

(1

elementiu AN AVNET COMPANY

# Connect nz.element14.com/connect-magazine **INTELLIGENT INTEGRATION**

Seamless components for smarter systems

> 06 Molex

10 Labfacility

18 **Boost manufacturing** efficiency

> 28 **Multicomp** Pro

**Order Now** 0800 90 80 80 nz-sales@element14.com

34 ADI

## EDITOR'S NOTE

## WELCOME TO THE LATEST EDITION OF CONNECT MAGAZINE

## Happy New Year! We're excited to bring you the latest edition of Connect Magazine, your go-to guide in the dynamic world of technology.

In this issue, we're exploring **'Intelligent Integration'** and how it's shaping smarter systems. From our trusted suppliers - Multicomp Pro, Molex, ADI, and Labfacility – to innovative solutions like air leak inspections that boost efficiency and save energy, there's plenty to inspire and inform.

We're deeply grateful for your continued support. Your interest keeps us motivated to bring you relevant insights and helpful resources.

To stay in the loop with future editions and special offers, visit **nz.element14.com/connect-magazine#register-with-us** or sign up for our emails. And if you'd like to share your thoughts, we're always here to listen at **nz-marketing@element14.com**.

Let's continue building smarter systems and brighter futures – TOGETHER!



Mamta Kumari Marketing Team element14



Dawn Tan



## Scan the QR Code to explore Connect online

The Publication is produced by element14, a trading name of element14 Pty Ltd, GST Reg No. 55-796 327, PO Box 74342, Greenlane, Auckland, 1546, New Zealand.

T&Cs apply - refer to **nz.element14.com/connect-magazine** for full terms.

## CONTENTS

- 04 INTERCONNECT
- **06** MOLEX
- **08** ELECTROMECHANICAL
- **10** LABFACILITY
- **12** ARTIFICIAL INTELLIGENCE AT THE EDGE
- **13** INDUSTRIAL AUTOMATION & CONTROL
- 15 SBC & DEVELOPMENT KITS
- 17 PASSIVES



BOOST MANUFACTURING EFFICIENCY

- 20 TOOLS & PRODUCTION SUPPLIES
- 23 CONNECT NEWS
- 24 TEST & MEASURE
- 28 MULTICOMP PRO
- 31 SEMICONDUCTORS
- **34** ADI
- **36** TOP TECH VOICES PODCAST

## WEIDI'S PICKS

## Intelligent Integration – Seamless Components for Smarter Systems

As we enter 2025, our commitment to driving innovation and delivering value to our partners is getting stronger than ever. In an industry where technological advancements continuously reshape every facet of business, element14 remains 'unwavering in its support of your success'. With our extensive product portfolio and expertise, we meet today's needs while positioning you for tomorrow's opportunities. We are here to drive your growth and ensure that your business stays ahead of the curve.

This issue highlights our strategic partnership with industry leaders — Multicomp Pro, Molex, ADI, and Labfacility — renowned for their expertise and dedication to advancing technology. From enhanced interconnectivity to sophisticated measurement tools, these solutions are crafted to accelerate your success in a dynamic marketplace.

Don't miss our featured article, **'Boost manufacturing** efficiency: How air leak inspections reduce energy wastage', offering actionable strategies to optimise energy use, reduce costs, and support sustainability goals.

As we forge ahead into 2025, I look forward to deepening our partnership, exploring milestones, and defining the future of innovation together. I invite you to visit our website and explore the products and resources we've carefully curated to support your goals.

Wishing you a prosperous and innovative 2025!





Weidi Zhu Vice President Sales APAC

## X E14Community

element14electronics

element14

Find us on the web at: **nz.element14.com** 

Latest issue: nz.element14.com/connect-magazine

\*All products shown in this publication are subject to Connect's terms & conditions



## **INTERCONNECT**

Discover the future of connectivity. Explore our comprehensive selection of connectors, cables, wires, and custom cable assemblies.

2160000200 - CABLE

ASSEMBLY

20% OFF

\$163.66

50.620 PA/RSW - CABLE



15300027 - AUTOMOTIVE

CONNECTOR HOUSING

To view more products, scan the QR code or visit: nz.element14.com/Connect48Interconnect

• A P T I V •

4831.1210 - PHONE AUDIO CONNECTOR

E SCHURTER

- 2-pole straight GST cable audio plug 2 5mm diameter
- Nickel-plated solder terminal

5% OFF \$1.68

Order Code 15219702

64322-1039 - AUTOMOTIVE CONNECTOR CONTACT



40% OFF

3% OFF

CABLE

\$0.277

MANAGEMENT TOOL

EVO7I-MET/PL-BU - CABLE

Sealed-connection system using matte-seal technology for CP 0.635 and 1.50mm terminals Hybrid-connection system using three different terminal sizes; CP 0.635/CP 1.50/CP 2.80mm terminals

High-density system due to compact-connector

Manual tensioning tool

with plastic housing

Length: 191 mm

ELV compliant

Order Code 183039302

HellermannTyton

**BV2 – JAR – BUTT SPLICE** molex

45% OFF

\$2.89

40% OFF

\$27.64

STORAGE RACK

8537-0690 - WIRE SPOOL



## Order Code 288810502

30A current rating

Nylon 6.6 (Polyamide 6.6)

glass filled body material

## multicomp PRO

- Blue Maximum electrical rating: 75°C 600 Volts Connector material:
- Copper plate

413645602

2RO-20WER

Reel diameter: 254mm

· Material : All welded cold

• Depth : 5-7/8" (149mm)

rolled steel

10% OFF Order Code \$17.00

> CABLE TREE JUNIOR - CABLE PRO POWER **REEL HOLDER STAND**

- - The branches are designed with no pins or clips to enable reels to be changed quickly and

Order Code 431875402

## molex

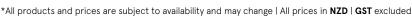
· 2.36mm (.093") diameter series pin RoHS compliant: Not applicable



20% OFF \$555.65 Order Code \$237.97 393134602 2478170-3 - COMPUTER FC681446 - DC POWER E TE CONNECTOR 9 to 9 female to female 6 feet 28 AWG cable assembly Contact resistance: 2 Ohms maximum Insulation resistance: 1M Ohms minimum 20% OFF



4



Order Code

441093002

\*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

GLAND

20% OFF

TOOL

\$279.37

11-03-0006 - EXTRACTION

## Temperature range: -20 to 100°C

Quick and easy

special tools

installation without

1.4mm wall thickness

Order Code 205611802

molex

Order Code

439786502

hylec

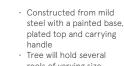
No. of positions: 56 Ways

Product range: NearStack

HD 216000 series

200mm

Cable length - Metric:



- reels of varying size
  - simply

CLIFF 2.5mm diameter pin Black colour socket



Order Code 115383302

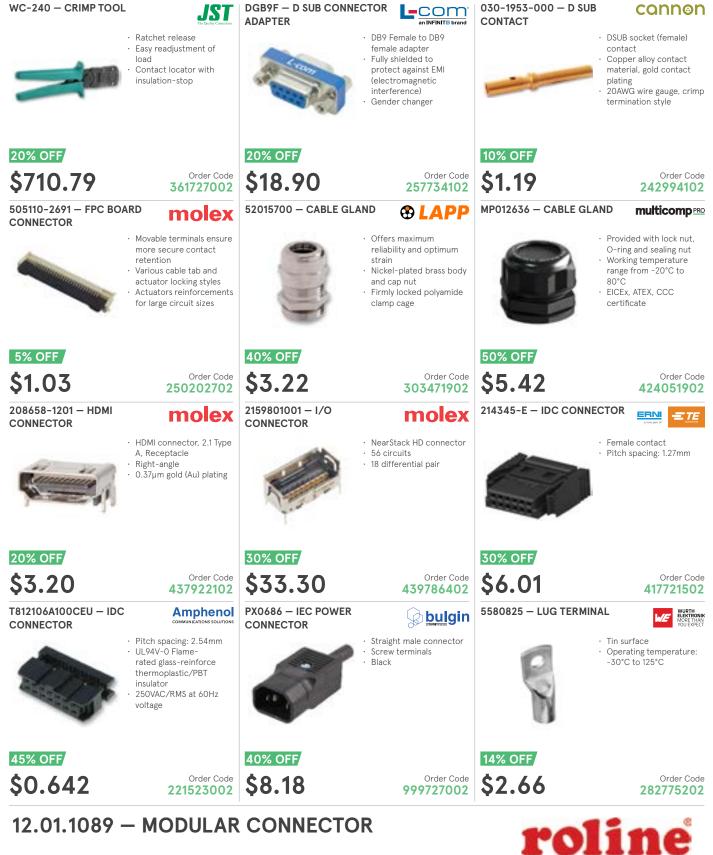


Order Code 228505402 \$41.62

### WC-240 - CRIMP TOOL



Seamless components for smarter systems



- UL94V-2 Flammability rating
- $\cdot$  100M $\Omega$  Isolation resistance
- Operating temperature: -40°C to 80°C

20% OFF \$10.20

Order Code 244425602



molex

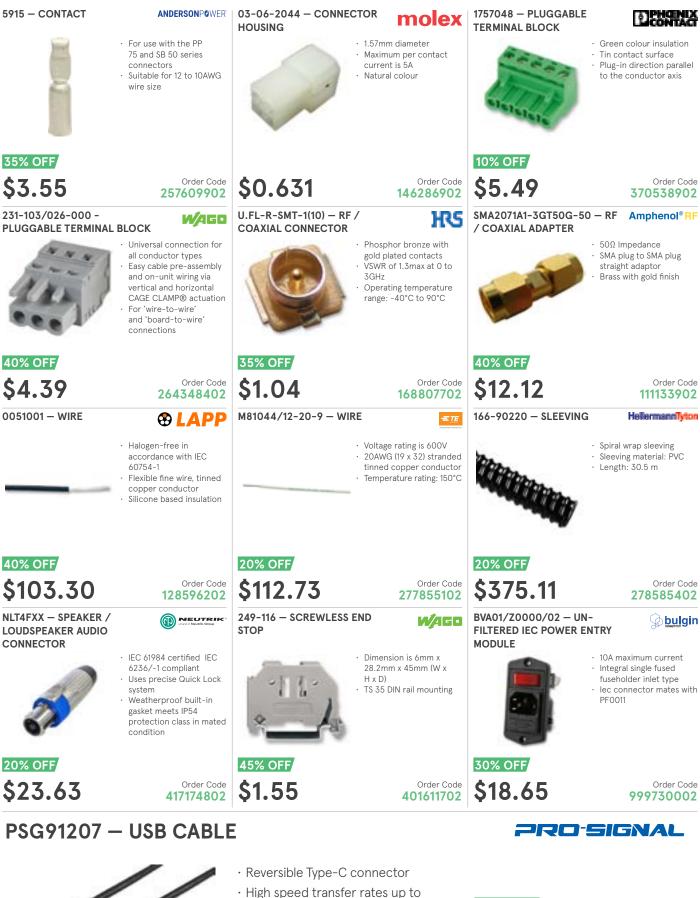
nz.element14.com/Connect48Molex

**Explore:** 

\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded

\*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

6



- 480Mb/s
- · Supports charging and data transfer

INTERCONNEC

Seamless components for smarter systems







Order Code





20% OFF

\$2.55

YW1B-V4E02R -**EMERGENCY STOP SWITCH** 



8

time delay fuse 0.0011Ω Cold resistance 1000A at 32VDC Interrupting rating

Order Code

DEC

Order Code

283385002

994317002

22mm panel hole

IP65 protection level

Screw terminals

diameter



30% OFF \$105.48

E69C06B - ENCODER COUPLING



Easy shaft alignment when mounting Low torsion rigidity and thus not suitable for high resolution 15 mm external diameter

Order Code 160303302

· 2 - 20A AC input range

Order Code \$848.09 182477702 RMA-21-SSV - AIR OMRON FLOWMETER

3% OFF



\$141.95

Order Code

## **OTE OMEGA**

- range: -200 to 1370°C (-328 to 2498°F)
- Support K, J, E, T, R, S, N, B type thermocouple
- Each channel store up to 8,6000 data points

Order Code 404925702



- · 51mm scale, stainless steel valve · Flowmeter range from
- 1-101 PM air Temperature limit of
- 130°F (54°C)

Order Code 426289102

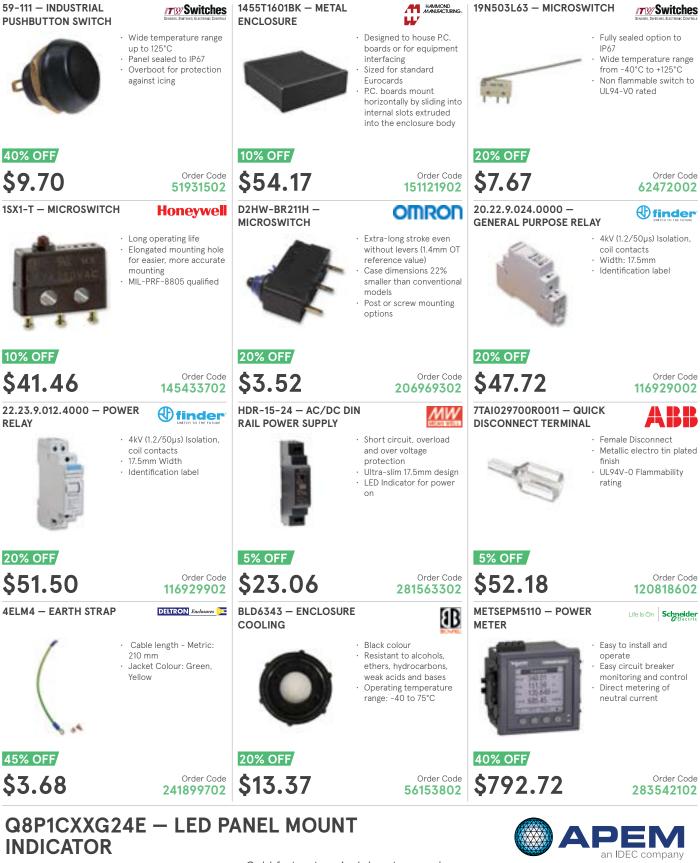
\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded

\*All savings shown are against the price on the **element14 website** as of November 2024 and are valid until 31<sup>st</sup> March 2025

20% OFF

\$39.61





- · Gold faston terminal denotes anode (+), silver terminal denotes cathode (-)
- · Pin and wire options are epoxy sealed at the rear of the bezels
- · Tricolour LED has red and green LEDs when both are connected, yellow is produced

40% OFF \$13.33

Order Code 249476702



EXPLORE MORE: nz.element14.com/connect-magazine

**ELECTROMECHANICA** 

N31221005 - SWITCH HEDS-5120#A06 - ENCODER . BROADCOM 26ASD22-01-1-AJS - ROTARY APEM 🎉 GRAYHILL CODE WHEEL **ENCODER** SEALING BOOT 500 Counts per · Adjustable stops For use with pushbutton • Angle of throw is 22.5° revolution switches 1/4" Shaft diameter Silicone rubber panel Suitable for 9500 series seal 30000RPM Velocity Ø4 x 0.70 (.157 x 0.70) bushing 20% OFF 45% OFF Order Code Order Code Order Code \$26.79 \$16.54 \$38.52 165487202 119040202 108252102 N36211005 - SWITCH 4650N – AC AXIAL FAN YL50/D50/R/RF/WR -ebmpapst **SEALING BOOT BEACON / SOUNDER** · For use with 1200, 4700 · Red flame enclosure · Nominal voltage of and 4800 Series · Lens made from flame-230VAC Suitable for 1200. 4700 retardant polycarbonate 2650rpm speed and 4800 series Ø12 19W power consumption plastic x 0.75 SI (.472x.075 IS) Flame-retardant ABS bushing. plastic enclosure 45% OFF 30% OFF 30% OFF \$14.27 Order Code \$356.75 Order Code Order Code \$49.87 108663802 240166202 959971102 4656Z - AC AXIAL FAN QSF-1/4-8-B - PNEUMATIC TA 241911 ENCLOSURE -FESTO FIBOX ebmpapst PLASTIC ENCLOSURE FITTING • High product quality · QS standard series push • UL94HB flammability Can be operated at 50 in fitting rating or 60Hz Female thread with Wire sealing or sealing IP20 protection rating external hex plugs for added security PBT and nickel-plated Easy installation brass 30% OFF 20% OFF 40% OFF Order Code Order Code Order Code \$66.14 \$9.20 \$38.47 142672702 343198002 142267102

## "

We want to thank you for working with us and believing in us over the past year. We've reached amazing goals together, and it's been an honour to support your requirements.

We look forward to supporting you even more in the coming year. Our focus will remain on improving your experience with element14 through new technologies, reliable services, access to over 1 million products from trusted brands, and improved delivery speeds.

Thank you for choosing element14. Here's to a remarkable 2025!



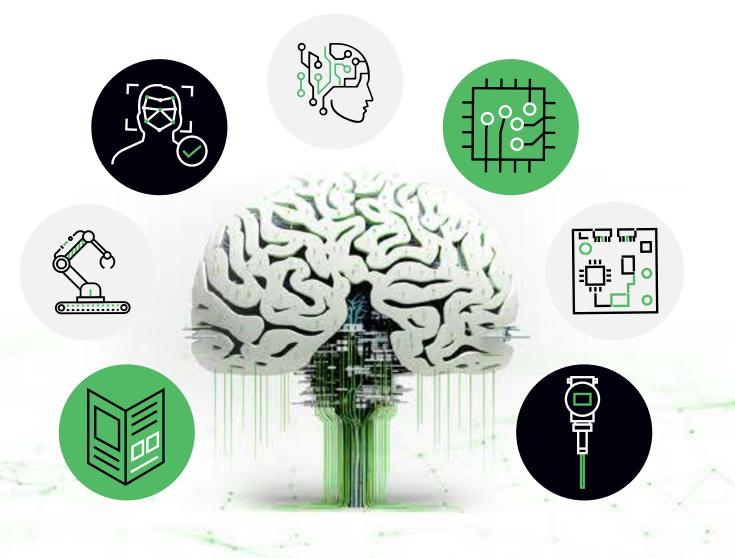
**Kiranjit Kaur** Regional Sales Manager Australia and New Zealand





# ARTIFICIAL INTELLIGENCE AT THE EDGE

## The Hub for Cutting-edge AI Solutions



nz.element14.com/artificial-intelligence



## **INDUSTRIAL AUTOMATION & CONTROL**

Optimise performance. Elevate your systems with our cutting-edge range of motor controls, sensors, PLCs, controllers, and SBCs.



To view more products, scan the QR code or visit: nz.element14.com/Connect48IAC

### 540160/556303/556501 multicomp PRO DC1765A-A -ANALOG DEVICES EVAL - ADUM3190EBZ -CONTROL THERMOSTAT **DEMONSTRATION BOARD EVALUATION BOARD** Temperature range: 0 Kit application type: Signal Isolated error amplifier Stable over time and to 120°C conditioning Application sub type: Clock Maximum body temperature (0.5% initial temperature: 80°C. buffer & level translator accuracy, 1% accuracy Maximum blub Kit Contents: over full temperature temperature: 150°C Demonstration board range) Minimum capillary LTC6957HMS-1 For Type II or Type III bending radius: 5mm compensation networks 30% OFF 2% OFF Order Code Order Code \$48.80 Order Code \$159.14 \$108.79 184634102 403286602 403325102 NCP18XH103D03RB - NTC NRSE104F3380B1F - NTC USP10982 - NTC F:T•N 🚧 Littelfuse muRata THERMISTOR THERMISTOR THERMISTOR Thermal time constant Thermistor mounting Tight tolerance SMD (in Air) 7s Moisture resistant Minimum operating Thermistor type: Bead Maximum operating temperature: -40°C Lead length 35mm temperature: 80°C Maximum operating temperature: 125°C 45% OFF 40% OFF 20% OFF \$0.337 Order Code Order Code Order Code \$0.390 \$3.75 397757902 413374902 290272702 METSEPM5100 - POWER AF/W/S/VC - SOUNDER XTR116UA/2K5 - SIGNAL Life Is On Schneider 🐥 Texas Institutions METER Fulleon CONDITIONER Control power of 415VAC 2-stage Alarm · Maximum supply voltage: Easily fitted within or on Easy to install and 36V operate control cabinets No. of Pins: 8 Maximum operating Easy for circuit breaker Can be fitted easily to monitoring and control most surfaces temperature: 125°C 40% OFF 20% OFF \$6.35 \$682.02 Order Code \$39.36 Order Code Order Code 283542202 243247602 300542302 MAX1452AAE+T - SIGNAL AD8495CRMZ-R7 - SIGNAL MP-05EN-45DEG-NC -ANALOG DEVICES ANALOG DEVICES multicomp PRO CONDITIONER CONDITIONER THERMAL SWITCH Supply voltage range • Manual reset · Low-cost and easyfrom 4.5V to 5.5V to-use Spade terminal Operating temperature Pretrimmed for K type · Silver alloy contacts range: -40°C to 125°C thermocouple, input 4mA to20mA, 0 to +5V voltage range is - 0.2V (rail to rail), 0.5V to +4.5V to – 1.6V ratiometric, +2.5V to Internal cold junction





±2.5V outputs supported



0.1Hz to 10Hz, TA = 25°C)



compensation, voltage

noise is 0.8µV p-p at (f =

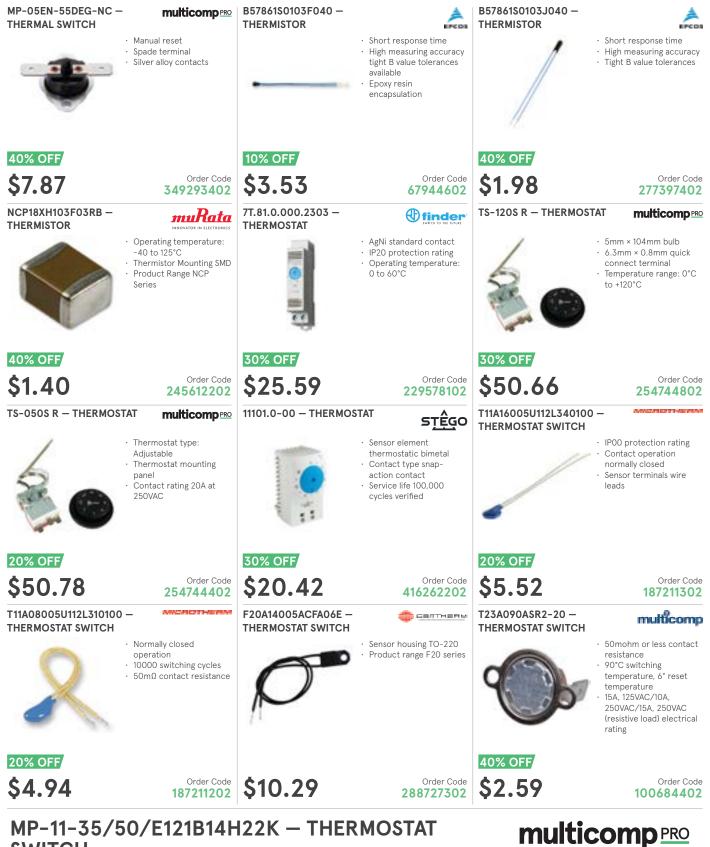




\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded 13 \*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025



EXPLORE MORE: nz.element14.com/connect-magazine



## MP-11-35/50/E121B14H22K - THERMOSTAT **SWITCH**



- · Automatic reset thermostat
- · Housing type, phenolic height 12mm, phenolic housing and shield material
- · 85°C (maximum off temperature), 100°C (maximum on temperature)
- 40% OFF \$3.54

Order Code 420577102

\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded 14 \*All savings shown are against the price on the **element14 website** as of November 2024 and are valid until 31<sup>st</sup> March 2025



## **SBC & DEVELOPMENT KITS**

Unleash your potential. Dive into our extensive lineup of single board computers, add-on modules, and development kits, tailored for limitless creativity.

MODULE

10% OFF

BOARD

\$435.17



CM4IO - COMPUTE MODULE

To view more products, scan the QR code or visit: nz.element14.com/Connect48SBC

Raspberry Pl

Order Code

356349102

Resoberry Pi

External +12V PSU

connectors

· 2 x full-size HDMI 2.0

with POE support

Gigabit Ethernet RJ45

### DFR0026 - ADD-ON BOARD

÷ • Wide voltage range: 3.3V

- to 5V Illumination range:
- 1-6000 Lux 15us Response time
- \$4.20

Order Code 294608502

**RPI NOIR CAMERA BOARD -**DAUGHTER BOARD



## Raspberry Pi

- 8 Megapixel camera capable of taking infrared photographs of 3280x2464 pixels Capture video at
- 1080p30, 720p60 and 640x480p90 resolutions All software is supported within the latest version of Raspbian Operating System

## \$24.35

AKX00032 - DEVELOPMENT BOARD



\$521.77

BOARD

DFR0205 - EVALUATION

### 8 digital i/p channels, 8 digital output channels, 3 analogue i/p channels, 4 analogue O/P channels 2 encoder channels ABZ

Order Code

 $\Theta \bullet$ 

367784602

High speed CAN

## \$56.81

**RASPBERRYPI-SENSEHAT** -DAUGHTER BOARD



### Gyroscope angular rate sensor: ±245/500/2000dps Accelerometer - Linear acceleration sensor: ±-2/4/8/16 g Magnetometer -

Magnetic Sensor: ± 4/8/12/16 gauss

## \$48.69

K8060 - 200 WATT AUDIO AMPLIFIER KIT

248309502 Ryslaman

Order Code



### Full discrete design using Epitaxial Darlington transistors DC supply circuit on board with LED indication

Overload and short circuit protection

\$18.91

SC0626 - POWER SUPPLY

- Featuring a captive micro USB cable White colour Type I Australia New Zealand
  - China plug style
- Order Code \$66.95 280429202

Raspherry Pi

SC0623 - POWER SUPPLY UNIT

- Order Code 351797102 Raspberry Pi
- 120mVp-p ripple & noise, ±2% line regulation and ±5% load regulation 12 5W maximum power, 2.5A nominal load current and 0.0A minimum load current

## Order Code

383850102

15

• Operating voltage of 5V Input voltage range: 7V to 21V

On-board Ethernet and

STM32H747XI Dual ARM®

Order Code

 $\Theta \Theta$ 

÷

414184502

USB-C® ports, plus

RS485 connectivity

Cortex® MCU Eight configurable digital/ analogue (0-10V) inputs

Clock speed of 20MHz



ABX00028 – DEVELOPMENT

AFX00001 - ARDUINO BOARD



\$19.90

BOARD



### Order Code 340469002

DFR0100 - EVALUATION OF THE RM OF Clearly labelled

- Prototype easily, full bundle, free upgrade

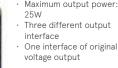


Order Code

\*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025



- CFTICIECT Maximum output power:
- interface
- voltage output
- 3% OFF \$14.12







UNIT

## ÷

- - 1.5m 18AWG output cable

### EXPLORE MORE: nz.element14.com/connect-magazine

### RPI5-STARTER KIT-4GB-EU. – multicomp PRO **RASPBERRY PI 5 STARTER KIT**



\$162.29

ABX00063 - SBC

\$119.89

SHIELD

\$7.91

5% OFF

\$38.40

114991193 - USB TO CAN

ANALYSER ADAPTER

DFR0762 - IO EXPANSION

- 2.4GHz quad-core 64-bit Arm Cortex-A76 CPU VideoCore VII GPU, supporting OpenGL ES 3.1. Vulkan 1.2
- Dual 4Kp60 HDMI output (HDR + HEVC decoder)

· 3.3V circuit operating

8mA DC current per

6-24V input voltage (VIN)

voltage

I/O pin

Order Code

Order Code

÷

OF TROBUT

Order Code

()

seeed

Order Code

393209102

397413502

414519202

· All pins brought out, no

sensors and modules

3.3V to 5.5V PH2.0

portable projects

Optimised the

efficiency

conversion protocol,

improved conversion

Saving the customised

settings automatically

Customised receiving ID, easy to debug

Supports various gravity

power port, applicable to

soldering required

 $\Theta$ 

SOM

434179102

RPI5 - STARTER KIT-8GB-EU. - multicomp PRO **RASPBERRY PI 5 STARTER KIT** 



2.4GHz quad-core 64-bit Arm Cortex-A76 CPU

A000062 - SBC

Input voltage

(recommended) range VideoCore VII GPU, from 7V to 12V supporting OpenGL ES 3.3V operating voltage 3.1. Vulkan 1.2 96KB of SRAM Dual 4Kp60 HDMI output (HDR + HEVC decoder) \$194.75 Order Code Order Code \$73.30 434179202 225086102 900-83668-0000-000 -DFR0063 - EXPANSION 💿 nvidia. ÷ BOARD CF11CHCT 1 x1 + 1 x4, total 80 GT/s Back lit (Blue with white (PCIe Gen3) 10/100/1000BASE-T char colour) Supply voltage: 5V Interface:I2C/TWI x1, Ethernet connectivity Voltage input of 5V, Gadgeteer interface x2 module power of 10W 15W 3% OFF Order Code Order Code \$777.36 \$18.74 412646802 376997302 **TEL0138 – USB GPS RECEIVER** FIT0737 - USB TO RS485 ÷ ÷ MODULE CFRCHC1 OFFICIENCY Asynchronous half duplex · Chip: UBX-G7020-KT (RS485) self-adaption Frequency: L1. 1575.42MHz/ mode of working L2, 1561.10MHZ/ Dimension is about L3,1602.00MHZ 85mm x 23mm x 13mm Baud Rate: 4800, 9600, 19200, 38400, 57600, 115200bps Order Code Order Code \$21.59 \$13.81 376989402 376986702 G950-01456-01 - USB **ZYMKEY 4I – HARDWARE** 🕤 zymbit Coral ACCELERATOR SECURITY MODULE · USB 3.0 (USB 3.1 Gen 1) Multifactor device type-C socket identity and Supports Linux, Mac, and authentication Windows on host CPU Data encryption and signing engine Key generation and secure storage Order Code \$71.41 Order Code \$124.46 358303302 294771602 ASM-1900180-11\_PROFESSIONAL ENCLOSURE multicomp PRO



- · Moulded from recyclable ABS, manufactured in the UK, white colour
- · 3-piece construction
- Integrated power button



Order Code 431345202

### \*All products and prices are subject to availability and may change | All prices in NZD | GST excluded 16 \*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

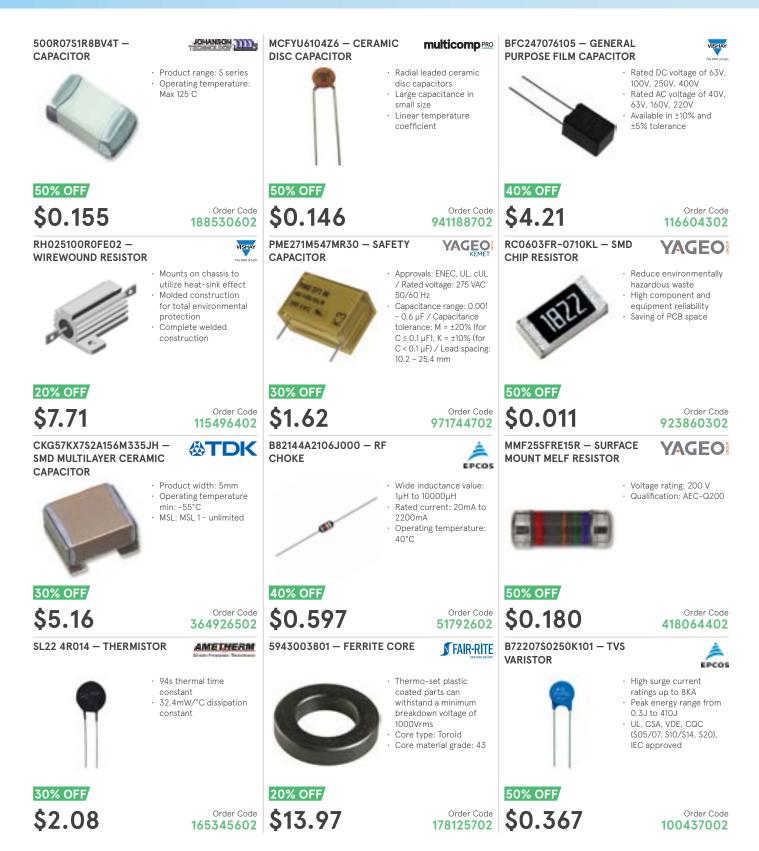


## PASSIVES

**Drive efficiency with precision and reliability.** Explore our passives series, from capacitors to inductors, filters, resistors, and EMC/RFI suppressions.



To view more products, scan the QR code or visit: nz.element14.com/Connect48Passives



\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded \*All savings shown are against the price on the **element14 website** as of November 2024 and are valid until 31<sup>st</sup> March 2025

17

## BOOST MANUFACTURING EFFICIENCY -HOW AIR LEAK INSPECTIONS REDUCE ENERGY WASTAGE

Author: element14 Technical Marketing Team

Pneumatic, or compressed air-driven, systems are used in a wide range of applications, including automated industrial equipment, processes, and motion control across various industries. However, compressed-air systems frequently suffer from leakage, leading to energy waste, reduced productivity, increased downtime, and a higher carbon footprint.

Compressed-air systems consume around 10% of all industrial electrical consumption, or 8.8 TWh each year, resulting in CO2 emissions of 3,100 kt/year (Source: Department for Energy Security and Net Zero, UK). Addressing air leak issues is essential for improving energy efficiency, sustainability, and productivity. This article highlights the importance of air leak inspections and how advanced air leak detection equipment assists in locating and repairing leaks.

## **Causes of compressed air leaks**

Air leaks in compressed air systems can result from various design, maintenance, and operation factors. Common causes include:

- Worn or damaged components: Continuous use leads to wear and tear on seals, gaskets, hoses, and fittings. Over time, these parts can deteriorate and develop gaps or cracks that allow air to escape. Seals and gaskets are also crucial for ensuring airtight connections, but they can become brittle or worn down, especially in high-pressure environments.
- **Improper installation:** Incorrect pipe fittings, joints, or coupling assembly can leave gaps or misalignments that allow air to escape. Poorly routed piping and installed double-ferrule compression fittings are particularly prone to leaks.
- **Poor maintenance:** Neglecting routine maintenance or delaying minor repairs on components like hoses, valves, pipes, joints, etc., can also lead to significant air loss.

• Mechanical damages and environmental effects: Vibrations from pneumatic systems, especially those with reciprocating compressors, can damage pipes and fittings. Repeated heating and cooling cycles can cause materials to expand and contract, leading to cracks or loosening of joints. Environmental factors such as moisture, extreme temperatures, or chemical exposure capies uper corrosion, increasing the risks of leaks.

## Calculating the cost associated with compressed air leaks:

Compressed air systems are present in almost every industrial facility, and leaks are inevitable. In a well-maintained system, the air leakage percentage should remain below 10%, but poorly maintained systems can lose between 20% and 30% of their air power. In some extreme cases, more than 80% of the air can be lost through leaks.

Compressed air systems are responsible for approximately \$5 billion annually in energy expenses, which represents a significant amount of wasted energy and money. In addition to higher energy costs, air leaks negatively affect compressed air users by reducing productivity and shortening equipment lifespan. So, it is necessary to estimate the amount of leakage in the pneumatic system for preventive actions. The energy cost for each leak can be calculated using the following formula:

## Annual cost of leaks = Leakage rate (cfm) X kW/cfm X operating hours X \$/kWh

For compressors equipped with start/stop controls, estimating the amount of leakage in the system can be done quickly. This process involves starting the compressor without demands on the system and ensuring that all air-operated end-use equipment is turned off. Multiple measurements are taken to calculate the average time the compressor needs to load and unload. The compressor will cycle on and off due to air leaks, which cause a drop in pressure as air escapes. The total leakage, expressed as a percentage, can then be determined using the following formula:

### Leakage (%) = $((T \times 100))/((T + t))$

### Where: T = on-load time (minutes)

### t = off-load time (minutes)

Leakage may be estimated in systems that use different control strategies if a pressure gauge is positioned downstream of the receiver. This approach involves estimating the system's total volume, including any downstream secondary air receivers, air mains, and piping (V, in cubic feet). The system should be brought to its normal operating pressure (P1, in psig) and allowed to return to this state. Afterwards, the time (T, in minutes) it takes for the system to drop to a lower pressure (P2, in psig), typically around half of the operating pressure, should be measured. The leakage rate can then be calculated using these measurements.

### Leakage (cfm free air) = ((V × (P1-P2))/(T × 14.7) × 1.25

A multiplying factor of 1.25 is used to adjust for leakage to the normal system pressure, which reduces leakage when the system pressure decreases. If leakage exceeds 10%, it suggests a scope for system improvement. It is recommended that these tests be conducted every quarter as part of a routine leak detection and repair program.

## **Detecting air leaks:**

Detecting air leaks in the compressor is essential for energy conservation and regular maintenance. The following methods are commonly used for air leak detection:

- **Listening:** This is the simplest and the most cost-effective method, relying on the ability to hear a hissing or whistling sound from the pneumatic line. However, this method only works for large leaks in easily accessible areas. It can be challenging to use in noisy environments, limiting its scope.
- **Soap water test:** This method involves applying soapy water to suspected leak points. If a leak is present, soap bubbles will form at the location of the air leakage. Although this method is simple, it is time-consuming and needs to provide more information on the size or volume of the leak.
- Acoustic method: The most effective and efficient way to detect air leaks is using acoustic imaging cameras. These cameras can identify leaks in various equipment, including pipes, valves, and pneumatic tools, even in noisy or hard-to-reach areas. Acoustic imaging allows testing while equipment runs and provides fast, accurate results.

## Acoustic imaging process:

When pressurized gas leaks, it moves from a high-pressure laminar flow toward low-pressure turbulence, creating a vortex. As the vortex breaks, it radiates ultrasonic energy. Acoustic imaging cameras, equipped with an array of tiny, super-sensitive microphones, capture this energy and create a sound spectrum based on decibel levels per frequency. An algorithm then overlays a sound image onto a visual image, pinpointing the location and size of the leak. This allows for real-time analysis, enabling manufacturers to identify and fix leaks quickly.

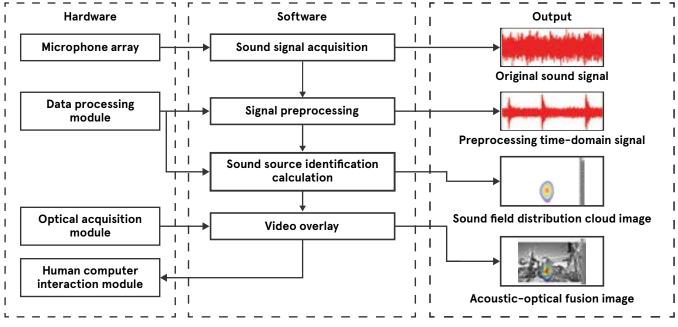


Figure 1: Functional diagram of acoustic imaging system



To continue reading Boost manufacturing efficiency- How air leak inspections reduce energy wastage, scan the QR code, or visit: nz.element14.com/boost-manufacturing-efficiency-how-air-leakinspections-reduce-energy-wastage-trc-ht



## **TOOLS & PRODUCTION SUPPLIES**

Driving success with the right tools. Browse our diverse selection of engineering tools and production supplies, including hand tools, soldering equipments, 3D printing solutions, adhesives, and fasteners.

SF 7240, 90ML - ADHESIVE

LOCTITE.

437851402

• Basic copper salt

monomer solvent

Blue-green liquid

appearance

chemical Reactive methacrylate



CR-10S - 3D PRINTER

To view more products, scan the QR code or visit: nz.element14.com/Connect48ToolsandProduction

CREALITY

Dual Z axis lead screw

rod which makes printing

quality better and more

CR-10S mainboard with

filament monitor function

CR-10S has the ability to

resume prints even after a power outage or lapse

stable

occurs

CR-10S PRO - 3D PRINTER



CREALITY

- 240VAC, 5.9A, 50/60Hz input, 24VDC output Double gear extrusion mechanism, imported
- PTFE tube V2.4.1 motherboard,
- diversified levelling

TSE397-C 100G - ADHESIVE



3% OFF

SEALANT

10% OFF

\$50.57

\$882.08



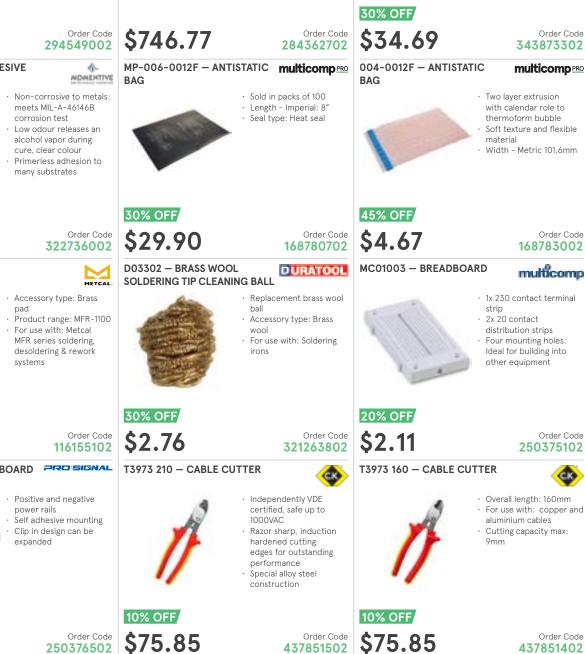
5% OFF \$23.69







10% OFF \$2.14



437851502

\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded

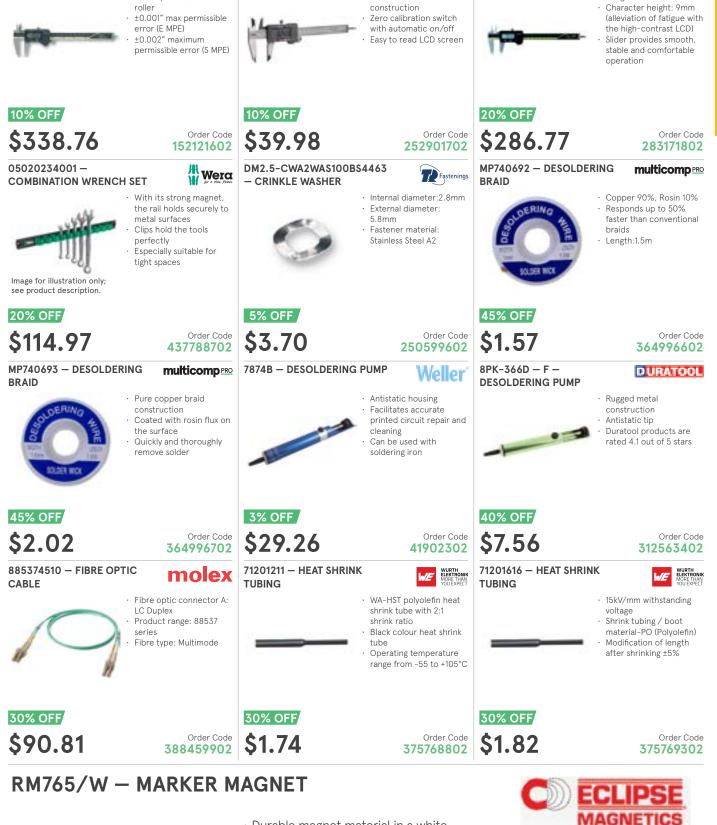
20 \*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025



500-184-30 - DIGITAL

CALLIPER

Durable stainless steel



76991500 - DIGITAL CALIPER

Mitutoyo

Flat depth bar, thumb

- · Durable magnet material in a white coloured plastic shell
- · Ideal for display or holding applications on noticeboards, cabinets, fridges etc
- · 20mm diameter

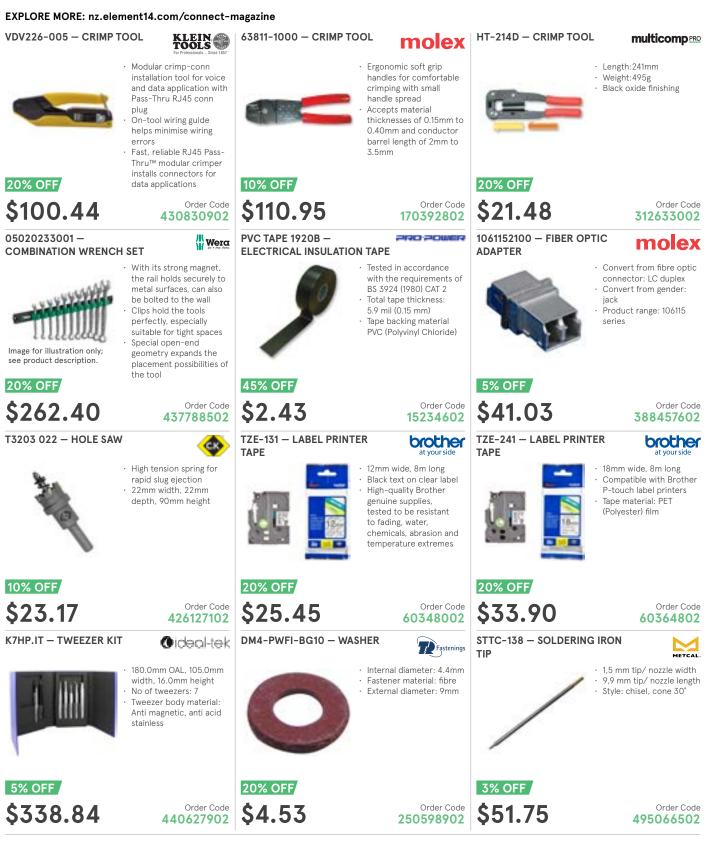
20% OFF \$8.01



500-196-30 - DIGITAL

CALIPER





## MP009732 – WIRE STRIPPER



- Making body: Injection molding
- · Shape of cutting edge: Cross cut
- · Color of body: Black, red

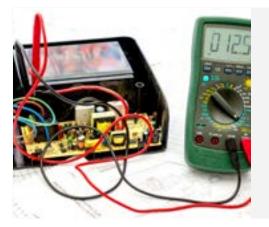


multicomp PRO

Order Code **397216502** 

## \*All products and prices are subject to availability and may change | All prices in NZD | GST excluded \*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

Stay up-to-date on the latest tech advancements and breakthroughs that are transforming industries and driving progress, offering everything from inventive solutions to cutting-edge technologies. – **Technical Marketing Team** 



## A selection guide for digital multimeters

Digital Multimeters (DMMs) are useful when it comes to measuring different electrical parameters across various applications. Different types of DMMs are available, from the immensely portable handheld meters to the common benchtops and the highly useful clamp meters.



nz.element14.com/a-selection-guide-for-digitalmultimeters-trc-sg



## A comprehensive guide to Electric Vehicle (EV) charging solutions

This guide breaks down the complexities of EV charging technology into simple, easy-to-understand concepts. Whether you're a beginner or an experienced professional, our comprehensive guide provides all the information you need to create efficient and reliable charging stations.



nz.element14.com/a-comprehensive-guide-to-evcharging-trc-wp



## A comprehensive guide to proximity sensors for industrial applications

Proximity sensors, such as ultrasonic sensors, capacitive sensors, magnetic sensors, optical sensors, and inductive sensors, play a vital role in identifying the presence or absence of objects in dynamic environments.



nz.element14.com/a-comprehensive-guide-toproximity-sensors-for-industrial-applications-trc-ar



## Whitepaper & solution guides

Timely insights are windows to advanced applications and future industry trends. Our whitepapers and eBooks help you plan for the future and sharpen your skills. To stay in tech, your journey begins here.



nz. element 14. com/white paper-technical-resources



## **TEST & MEASURE**

Achieve precision in every measurement. We carry oscilloscopes, spectrum analysers, digital multimeters, and a variety of accessories- all designed to enhance accuracy and reliability in your testing processes.



To view more products, scan the QR code or visit: nz.element14.com/Connect48TestandMeasure

### R&S HMC8012 - BENCH EDU36311A-AU - BENCH **W** KEYSIGHT 72-7730A - DIGITAL multicomp PRO ROHDE & SCHWARZ **DIGITAL MULTIMETER** POWER SUPPLY MULTIMETER Simultaneous display of 3 Triple output model with · 100KHz bandwidth Auto ranging Duty cycle: 10% to 90% measurements, e.g. DC + two channels up to 30V and one channel up to 6V AC + Statistics Up to 200 measurements Low output ripple and , per second noise DC basic accuracy Excellent programming / 0.015% readback accuracy 5% OFF 2% OFF 20% OFF \$2,111.10 Order Code \$1,677.07 Order Code Order Code \$302.65 240877102 438280602 210003502 MP721075 - DIGITAL MP731065 - DIGITAL MP720024 EU-UK – DIGITAL multicomp PRO multicomp PRO multicomp PRO MULTIMETER OSCILLOSCOPE OSCILLOSCOPE High precision · Vertical resolution (A/D) 12 bits high vertical Compact design max: 8bits resolution Bandwidth: 100MHz · True RMS 8" large clear TFT display Sample rate: 1GS/s (800x600) Ultra-thin body design, less space accommodation 20% OFF 20% OFF 20% OFF Order Code \$2,057.91 Order Code Order Code \$243.17 \$730.90 434742402 435102402 310758202 **BK880 – LCR METER BK PRECISION** 72-8155 - LCR METER TA041 - OSCILLOSCOPE multicomp PRO pico PROBE · 40,000 counts resolution · Supplied with a battery, Bandwidth: DC to 25 MHz on primary and 10,000 test clip, holster (-3 dB) counts resolution on Inductance measure Attenuation ranges: 10:1 secondary display max: 20H / 100:1 L, C, R, and Z (BK879B Test frequency max: 1kHz DC accuracy: ±2% & BK880 only) primary measurements Automatic calculation of secondary parameters D, Q, Theta, ESR (Theta/ESR for 879B &880 only), and 20% OFF 3% OFF DCR (BK880 only) Order Code Order Code \$942.39 Order Code \$72.60 \$685.27 277032202 128364302 166734302 pico

PICOSCOPE 3403D - PC USB OSCILLOSCOPE



24

MP730679 - HANDHELD DIGITAL MULTIMETER



## pointer protection

20% OFF \$194.33

- multicomp PRO · Large, backlit LCD screen with 22,000 count
- High resolution analogue
  - 20% OFF
  - Order Code \$207.93 367728802



- function offers 41/2 digits and V, A, ohm, farad, diode, continuity testing modes
- 250MSa/s sample rate Sample & peak detect acquisition model



\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded

- - 64MS buffer memory
  - 100000 waveforms per second
    - USB 3.0 connected and powered

## MP720780 - HANDHELD DIGITAL multicomp PRO





# Full scale overload

display

246021902

Order Code

\*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

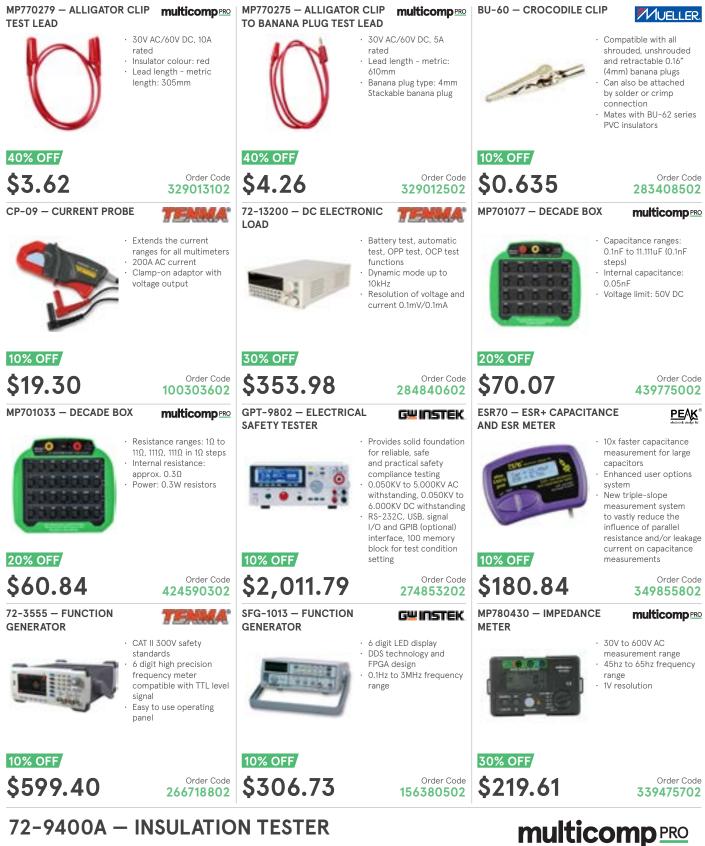
3% OFF











## EXPLORE MORE: nz.element14.com/connect-magazine

## \*All products and prices are subject to availability and may change | All prices in NZD | GST excluded

26 \*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

Auto ranging

· 2000 count LCD backlit display · Alarm light display and buzzer

20% OFF

Order Code 249951802

\$104.44

Seamless components for smarter systems

**TEST & MEASURE** 



"

We're thrilled to continue partnering with you to deliver innovative solutions that drive the growth and success of your business. Let's make 2025 another remarkable year of innovation for your team and organisation.

Stay tuned for exciting marketing campaigns and exclusive deals tailored to your needs. Our team is working tirelessly and can't wait to share what's next!



**Tess Turner** Marketing Manager ANZ & KR



## multicomp PRO

The engineer's choice for tests, tools, production supplies, connectors, cables, wires, electromechanical, passives, and semiconductors.



To view more products, scan the QR code or visit: nz.element14.com/Connect48MulticompPro

multicomp PRO

MP011739 - HMI TOUCH SCREEN



## 5% OFF \$404.14

MP3238.230 - ENCLOSURE COOLING

multicomp PRO

Order Code

416923102

multicomp PRO

Hardware includes CPU

Cortex A7 528MHz, 128M flash, 128M DRMIII RAM

LCD with 16000k colours

Interface includes COM1:

800 × 480 resolution

RS485/RS422; COM2:

RS232

- · Frame size of 148mm · Impeded air flow of 65-85m3/h
- Powered by self-starting shaded pole motor

20% OFF \$75.89

MP011250 - ROCKER SWITCH multicomp



- Contact voltage VAC: 250V
- Switch mounting: Panel mount
- Switch terminals: Quick connect

· SPST, 2P, maintained, anti

vandal switch 6A 125/250V, 6A

3-48VDC ratings

50mohm (maximum)

initial contact resistance

40% OFF

\$6.19

MP-19Z11FNNNS - VANDAL RESISTANT SWITCH



40% OFF \$14.16





MP-D16LMT1-1CB multicomp PRO INDUSTRIAL PUSHBUTTON SWITCH







## user-friendly panel

### 20% OFF Order Code \$51.39 420352702

## multicomp PRO

- 8-port 10/100Mbps Ethernet switch Power input of +5V to +30VDC
- Wide temperature range from -10°C to +60°C

### 20% OFF Order Code \$452.85 430549002

MP011734 - HEATER

MP-MS-213-3-1-0500 -REED SENSOR

MP-C40 - AUTOMATIC

TRANSFER SW CONTROLLER





MP-RR036 - ROCKER SWITCH



## multicomp PRO

- · 15W heating capacity · PTC resistor, self regulating heating element
- Anodized aluminium profile body

Order Code 416922602

### multicomp PRO

- Under/over voltage protection Phase sequence/ unbalanced current
- protection Configurable timer for generator start, transfer delay, restore delay, and generator cooling time

### Order Code 420350802

### multicomp PRO

- · Easy mounting and fixing, fitted with wire leads, compact size
- Compact housing, mechanically protected
- UL approval, replaces various competitors types

Order Code 426143802

### multicomp PRO

- · 12VDC to 24VDC rating. RED LED 12/24VDC lamp
- Switch action of ON-OFF, SPST, 3P, LED illumination 30Mohm maximum contact resistance, 100Mohm minimum insulation resistance (500VDC)



\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded

\*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

Order Code

416343802



\$136.40

## MP-AP2E-BTE01R -**EMERGENCY STOP SWITCH**

multicomp PRO Mechanical lifetime: 300,000 cycles Rotate release switch







with SPST configuration Operating temperature range: -25°C to 70°C



multicomp PRO

\$3.00



Order Code

420828702



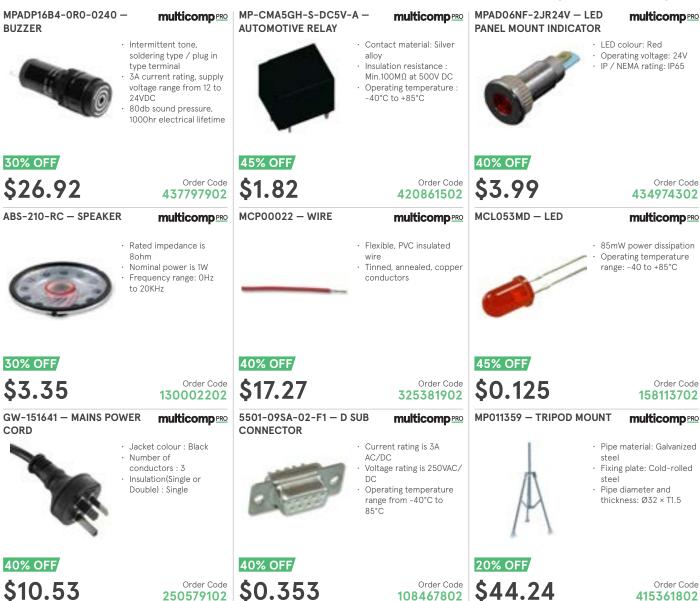
\$22.13

20% OFF

20% OFF

\$274.48

MP-008 - SWITCH



## "

Multicomp Pro is excited to be celebrating its 5-Year Anniversary! When the brand was launched, our objective was to offer improved quality and value to electrical engineers at all stages of their projects—from prototype to production, and even for students.

Over the last 5 years, it's been wonderful to see the brand grow and continue to expand its product range. Even better has been the positive feedback from our customers, which reinforces our belief that Multicomp Pro is the Engineer's Choice.



**John Casiello** Global Marketing Multicomp Pro

# multicomp PRO

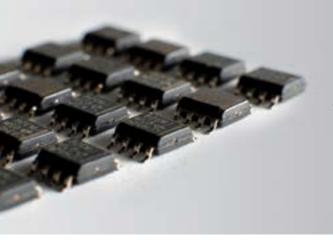
## **THE ENGINEER'S CHOICE** For Quality & Value From Prototype to Production

Multicomp Pro understands that engineers require cost-effective, reliable solutions.

Regardless of if you are starting a prototype, in mass production or maintenance and repair operations, Multicomp Pro offers the electronic components and equipment that engineers need with the quality and value they require.



Learn more: nz.element14.com/multicomp-pro



## **SEMICONDUCTORS**

Accelerate innovation. Power your next breakthrough with our catalogue of semiconductors, including ICs, discretes, transistors, and more.



To view more products, scan the QR code or visit: nz.element14.com/Connect48Semiconductors

### IA186XLPLC68IR2 - 16 BIT ANALOG DEVICES IA188XLPLC68IR2 - 16 BIT ANALOG DEVICES PIC12LF1822-I/MF - 8 BIT 🜆 Місяоснія MICROCONTROLLER MICROCONTROLLER MCU, FLASH DRAM refresh control Local bus controller, · 49 (14-bit wide) easy unit, power-save mode power-save mode instructions to learn Static, modular CPU. Direct addressing 16 level hardware stack 2 (16-bit) file select capability to 1MByte clock generator, two independent DMA memory and 64Kbyte I/O registers channels Supply current is 90mA Programmable interrupt typical 11111111111111 ATT A LOCAL DR. controller, three programmable 16-bit timers 20% OFF 3% OFF Order Code \$2.21 Order Code \$59.41 Order Code \$49.44 403375502 403375802 181491402 PIC12F635-I/P - 8 BIT MCU INN4073C-H182-TL - AC / INN4074C-H182-TL - AC / Power integrations 🐠 Місяоснія DC CONVERTER DC CONVERTER Integrated FluxLink. 35 (14-bit wide) easy Zero voltage switching HIPOT-isolated, feedback (ZVS) flyback controller instructions to learn 8 level hardware stack with driver for link 1 (9-bit) file select ClampZeroTM (active Exceptional CV/CC clamp IC) register accuracy, independent of Unique control algorithm external components to enable ZVS in both DCM and CCM Adjustable accurate output current sense Robust 750V PowiGaNTM using external sense primary switch resistor 3% OFF 3% OFF 3% OFF / \$3.34 Order Code Order Code Order Code \$4.97 \$5.38 121268702 377166202 377166102 VIPERGAN100TR - AC / DC DG509ACJ+ - ANALOGUE ADG801BRMZ - ANALOGUE ANALOG DEVICES ANALOG DEVICES Δ7/ CONVERTER MULTIPLEXER SWITCH · Supply voltage range is Quasi-resonant (QR) · On resistance is 0.40hm flyback controller, 650V ±4.5V to ±18V maximum at 125°C E-mode power GaN Operating temperature On resistance flatness transistor range from 0°C to 70°C is 0.08 ohm maximum Embedded sense FET, Break before make at 125°C Single supply operation is vallev-lock to ensure switching constant valley skipping 1.8V to 5.5V Advanced power management for less than 30mW standby power consumption with 20% OFF 30% OFF 40% OFF adaptive burst-mode \$6.69 Order Code \$24.51 Order Code \$4.21 Order Code 414249702 251384602 402235202 ADCMP604BKSZ-REEL7 -ADCMP604BKSZ-R2 -LTC6754HUD#PBF -ANALOG DEVICES ANALOG DEVICES ANALOG DEVICES ANALOGUE COMPARATOR ANALOGUE COMPARATOR ANALOGUE COMPARATOR Fully specified rail to rail Power dissipation is · Low propagation delay is at VCCI = 2.5V to 5.5V 37mW typical at (VCCI = 1.8ns typ Low glitch LVDS-VCCO = 2.5V)Low overdrive dispersion Power supply rejection compatible output stage is 1ns typ ratio is -50dB minimum LVDS compatible output Propagation delay is 1.6ns typical at (VCCI = VCCO = at (VCCI = VCCO = 2.5V stage 2.5V to 5V, VOD = 50mV) to 5V) Input bias current is ±2µA typical 40% OFF 40% OFF 40% OFF Order Code \$9.44 Order Code \$8.58 Order Code

\$7.51

402260602

\*All products and prices are subject to availability and may change | All prices in NZD | GST excluded 31 \*All savings shown are against the price on the element14 website as of November 2024 and are valid until 31st March 2025

402278902

402260502

## EXPLORE MORE: nz.element14.com/connect-magazine

### ICL7109CPL+ - ANALOGUE TO DIGITAL CONVERTER



30% OFF

20% OFF

10% OFF

35% OFF

\$8.16

\$34.85

**BLUETOOTH MODULE** 

CYW20822P4TAI040XUMA1 --

\$13.69

ADSP-21489KSWZ-3A -

AUDIO PROCESSOR

MCU

\$43.89

LPC5534JBD100E - ARM

### ANALOG DEVICES Zero integrator phase for fast overload recovery Hysteresis and crosstalk eliminated Enhanced bus driving

capability

Order Code

Order Code

395429502

ANALOG DEVICES

251867402

High-efficient 40nm flash

Over 600 core mark (4 17

/MHz running in flash

with cache) and active

power as low as 57uA/

and security with

High performance

processing Single-instruction,

computational architecture

SHARC family

Up to 12 GPIOs,

-45°C to +85°C

16MHz Arm®

Cortex®-M0

temperature range from

microcontroller unit MCU

memory and castelated

solder pad connections

1MB embedded on-

module serial flash

for ease-of-use

performance audio

multiple-data (SIMD)

floating-point processor optimised for high

Trust7one-M

technology

MH7 Enhanced safety

AD7626BCPZ - ANALOGUE

TO DIGITAL CONVERTER

# 20% OFF

## \$99.55

### LPC5534JBD64E - ARM MCU



20% OFF

\$12.89

### Comprehensive enablement with MCUXpresso ecosystem Integrated power management unit, low power modes, power-on reset (POR), brown-outdetect (BOD)

FlexComm, I2C-bus, SPI, digital microphone, I3C bus, CAN FD, USB 2.0 full speed interfaces

> Order Code 395429602

## ANALOG DEVICES

ANALOG DEVICES

Order Code

401658202

Throughput: 10MSPS

16bit no missing codes

INL: ±0.45LSB, DNL:

SNR: 91.5dB

±0.35LSB

MCU

20% OFF

\$9.37

20% OFF

\$53.62

CYW20829B0LKMLXQLA1 -

**BLUETOOTH MODULE** 

ADSP-21371KSWZ-2B -

AUDIO PROCESSOR

 Single-instruction, multiple-data (SIMD) computational architecture Code compatible with all other members of the SHARC family S/PDIF-compatible digital audio receiver/ transmitter

Datawire (DMA) controller

with 16 channels, 32KB

Order Code 402571002

(Infineen

NCP5111DR2G - DUAL DRIVER IC



40% OFF \$1.38

- · High and low drive outputs
- pins

## FAN7382MX – DUAL MOSFET DRIVER



- · Floating channels designed for bootstrap operation to +600V
- · Common-mode dv/dt noise cancelling circuit
- UVLO functions for both channels

Order Code 122825202

\$1.61



- High-efficient 40nm flash technology Over 600 core mark (4.17 /MHz running in flash with cache) and active power as low as 57uA/MHz Enhanced safety
- and security with TrustZone-M

LPC5534JHI48/00E - ARM

Order Code 395429702



- 266MHz instruction rate 1Mbit on chip SRAM
  4Mbit ROM, JTAG access
- to memory permitted with a 64-bit key

Order Code 402571202

## Cinfineon

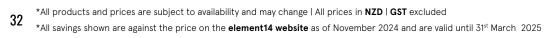
- · Six power modes for fine-grained power management
- Deep sleep mode current of 4.5µA with 64KB SRAM retention On-chip DC-DC buck
- converter, 8MHz internal main oscillator (IMO) with ±2% accuracy

Order Code 429784402

## onsemi

- - Up to VCC swing on input
- Extended allowable negative bridge pin voltage swing to -10V for signal propagation

Order Code 154713802



Order Code 438060202

and data retention



20% OFF

\$8.22



ADSP-21369KBPZ-3A —

AUDIO PROCESSOR

## 3% OFF

## \$133.62

CYW20829B0LKMLTXUMA1 -**BLUETOOTH MODULE** 





## cache for greater XIP performance with lower power 256KB SRAM with power

control, OTP eFuse array for security provisioning 2.4GHz RF transceiver drive, digital PHY

with 50 ohm antenna

Order Code 429784502

20% OFF

\$8.22

Onsemi

AR35-J13T - ENCODER

\$1,009.03

EVAL-ADM2867EEBZ -

**EVALUATION BOARD** 

ALIGNMENT JIG

## BROADCOM

SEMICONDUCTORS

- AR35 through hollow with 8mm shaft Product range: AR35-T25 series
- User-programmable resolution up to 25 bits single turn

### Order Code 406350002



- Simplified evaluation of the 25Mbps ADM2867E RS-485 transceiver 2-layer PCB compliant
- to EN 55032 Class B radiated emissions On-board ADP7104 LDO regulator with jumper for simplified evaluation in 5V or 3.3V configuration

Order Code 403301102



- Designed for RS-485 interface applications Common mode input
- voltage range from -7V to 12V Driver maintains high
- impedance in 3-state or with the power OFF

Order Code 312991202

### BROADCOM

- with quartz lens High-radiant flux
- output using InGaN dice technology
- Compatible with the reflow soldering process

## 406131402



AHEAD OF WHAT'S POSSIBLE™

30% OFF \$17.65

Order Code 402372502

### CY8CKIT-062S4 - EMBEDDED **DEVELOPMENT KIT**





Rich analogue including dual SAR ADCs, DAC, Opamps and comparators

Infineon

Order Code

385868202

ANALOG DEVICES

Order Code

Order Code

392470002

403300502

Capable of operating in system deep sleep mode

## \$104.64

EVAL-ADM2682EEBZ -**EVALUATION BOARD** 



### 5KV RMS power and signal isolated RS-485/ RS-422 transceiver Convenient connections for power and signal

through screw terminal blocks Configurable as half duplex or full duplex

\$169.87

EK-VCK190-G - EVALUATION KIT



- Equipped with Versal ACAP VC1902 production
- silicon Al and DSP engines providing 100X greater compute over today's server-class CPUs
- Pre-built partner reference designs for rapid prototyping

## \$24,809

MAX14939GWE+ - RS485 TRANSCEIVER ISOLATED



30% OFF \$15.05

### ANALOG DEVICES UL according to UL1577. cUL according to CSA bulletin 5A, VDE 0884-10 (safety approval) Integrated LDO for cableside power, compliant with RS-485 EIA/TIa-485 standard

rate, allows up to 128 devices on the bus

20Mbps maximum data

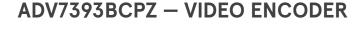
Order Code

261269602

10% OFF

\$4.31

EMITTER





### · Patented content-dependent low-power DAC operation

- Automatic cable detection and DAC power-down, individual DAC on/off control
- · Sleep mode with minimal power consumption, copy generation management system (CGMS)





### bit, 2400MT/s, attached to Processor Subsystem (PS) Ganged SFP28 cage to support up to 4 SFP/

XP1001000-05R - EMBEDDED

Complete, integrated

Embedded web server

10/100Mbit Ethernet

Simplified evaluation

to EN 55032/CISPR

32 Class B radiated

On-board ADP7104 LDO

simplified evaluation in

· DDR4 component

2666MT/s, attached to

Programmable Logic (PL)

DDR4 SODIMM - 4GB 64-

SFP+/zSFP+/SFP28

- 4GB. 64-bit.

5V or 3.3V configuration

Order Code

403300902

regulator with jumper for

of the ADM2863E

transceiver 2-layer PCB compliant

emissions

(auto sensing)

factor

solution in an RJ45 form

Order Code

211525902

ANALOG DEVICES

**DEVICE SERVER MODULE** 

\$104.28

EVAL-ADM2863EEBZ -

**EVALUATION BOARD** 

modules \$28,193.54

## UV LED

resin encapsulation Wide viewing angle at 130°

Order Code 406131602

30% OFF \$12.98



Order Code

## · High-reliability package



AUV4-PSD0-0MP0H - UV

33



\$181.01

TRANSCEIVER

ST485ERBDR - RS422/RS485

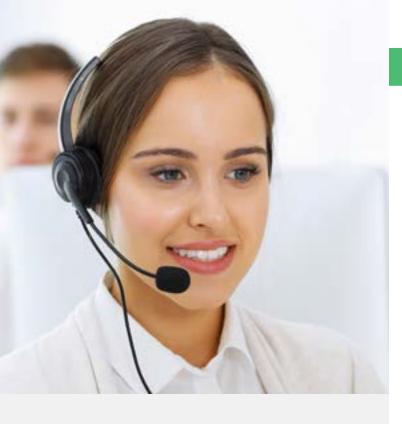


## GIGABIT MULTIMEDIA SERIAL LINK (GMSL) CAMERAS AS AN ALTERNATIVE TO GIGE VISION CAMERAS

GMSL cameras often can provide equivalent or better link rates and features at a lower cost, lower power consumption, and simpler system architecture with a smaller system footprint. Visit our website to explore the latest 'ADI'. Gigabit Multimedia Serial Link (GMSL) serialiser development platforms.



Learn more: nz.element14.com/Connect48ADI



## **Customer Service**

**0800 90 80 80** Monday to Friday 10:00 AM - 8:30 PM (NZDT) **nz-sales@element14.com** 24/5 Online Live Chat

### **Technical Support**

For Account Customers Only 0800 90 80 83 Monday to Friday 10:00 AM - 8:30 PM (NZDT) nz-technical@element14.com Online Live Chat

## **Account Enquiries**

0800 90 80 88 nz-finance@element14.com

## **Quote Requests**

0800 90 80 86 Monday to Friday 10:00 AM - 8:00 PM (NZDT) nz-guotes@element14.com



Scan the QR code to view more ways to contact us

### **Returns Policy**

Call **0800 90 80 80**, email **nz-sales@element14.com** or visit our website and complete the online RMA request form. Upon authorisation, you will need to return the product in its original packaging. Few conditions apply. Refer to the element14 'Standard Terms and Conditions of Sale' that is available at **nz.element14.com/help-return-policy**.

## **OUR SERVICES**

## Take advantage of our local services

**Dedicated account management** Account holders will be assigned an individual account manager to help with your queries, product resourcing and orders



A global electronics distributor that provides you with local support In person, via phone and online

Ì	-



**Quoting on volume requirements** Dedicated team to assist in quoting you the best possible price



**Not in catalogue sourcing** When a product is not available in our range, our team can help you source it directly from the manufacturer



**Contract pricing** Special pricing is available for eligible customers



**Flexible scheduled ordering** Place an order now and opt to schedule its delivery for a later date

_	$\sim$	7

**Exclusive buffer stock arrangements** Reserve stock now for a future order - available for qualified customers

### Terms & Conditions

- All products shown in this issue of Connect (the 'Publication') are subject to availability and all sales of these products are subject to element14's standard terms and conditions of sale as set out on element14 website. To obtain a copy, call 0800 90 80 80 or visit: nz.element14.com/terms-and-conditions
- The publication, products and prices are valid between 1st January and 31st March 2025
- All savings shown in the publication are against the prices on the element14 website (nz.element14.com) as of November 2024 and are subject to change
- Connect savings cannot be used in conjunction with any discount and/or offer
- Any further discount (special pricing, quote discounts, discount vouchers, etc.) is not applicable on Connect products
- Prices in the publication exclude delivery charges & GST. Prices are inclusive of any discount mentioned in the publication
- element14 reserves the right to withdraw any product from sale for legal or commercial reasons
- Changes may be made to products and prices by element14 and/or our suppliers
- The products in the publication are meant for business customers and consumers. By ordering, the customers confirm that they wish to obtain the supplies for their business or personal purposes and not for reselling
- While every effort has been made to ensure the accuracy of the information in the publication, element14 does not warrant the accuracy or completeness of the information and accepts no liability for errors in, or omissions from the publication, including those arising from our negligence
- Orders must be placed before 9 PM. For more details visit: nz.element14.com/help-delivery-information



# LISTEN TO TOP TECH VOICES

Get inspired by the experts transforming the tech landscape



nz.element14.com/top-tech-voices