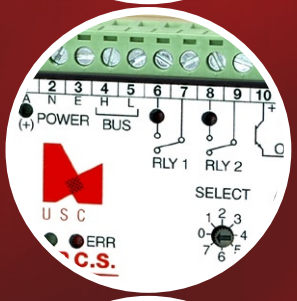

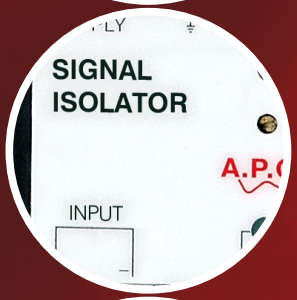

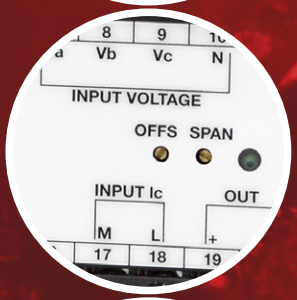

APCS Short Form Catalogue

"The Signal Conditioning Specialists"

A.P.C.S.

A division of NEFF

www.apcs.net.au

FACTORY CONTROLS
03 5278 8222
sales@factorycontrols.com.au
www.factorycontrols.com.au
65 Douro Street, North Geelong Victoria 3215

APCS is a leading Australian designer and supplier of high quality and competitively priced signal conditioning modules.

Demand for APCS product over 25 years of successful operation has enabled development of a growing range of over 200 individual products including:

- Signal isolators / Splitters
- Transmitters
- Process alarms
- Power supplies
- Electrical transducers

Available inputs include:

- 4-20mA
- AC or DC current and voltage
- pH and conductivity
- RTD and thermocouple temperature sensors
- Frequency and speed measurement
- Strain gauge sensors

Power supply configurations include isolated, output loop powered or input signal powered. Most products are conveniently housed in industry standard DIN-rail enclosures. APCS also designs and manufactures OEM products, specials and complete systems.

APCS products are used in varied industries:

Chemical and petrochemical
Water supplies
Metal smelting and steel making
Mining / Glass manufacture
Oil and gas / Cement manufacture
Utilities and power generation
Agriculture / Paper manufacture
Building management
Food and beverage processing
Waste water and sewage treatment
Research and development
Transport and Marine

Digital advance

Recent advancements in digital technology have allowed APCS to develop one simple alternative to traditional instrumentation.

The Universal Signal Conditioner USC701 covers over 80% of all signal conditioning applications, has capability for digital communications including field bus and can be easily programmed via PC, Internet or unique access module.

Service

A well-trusted Australian owned manufacturer of instrumentation, APCS prides itself on exceeding customer's expectations for quality, short lead time and customer service with an emphasis on technical support.

APCS' specialised team of engineers offers superior expertise in the field of signal conditioning and instrumentation.

Quality

All APCS products are manufactured in the Ness manufacturing which is accredited to the internationally recognised ISO9001/2000 quality standard.

Meticulous adherence to this standard and our financial commitment to our multi-million dollar manufacturing facility at Seven Hills, NSW is indicative of our commitment to quality and excellence in manufacturing.

Distribution

International and Australian wide comprehensive distribution networks have been established to provide the best local back-up and system application assistance.
Our representatives are appointed only after they have proven themselves to be capable of properly supporting our customers.

A.P.C.S.
A division of NESS

www.apcs.net.au

APCS Distributors can be found in most major and regional cities in AUSTRALIA.
• Sydney • Melbourne • Brisbane • Perth • Adelaide • Newcastle • Wollongong • Bathurst • Albury
• Geelong • Gippsland • Gladstone • Townsville • Hobart • Devonport • Darwin

INTERNATIONAL
• USA: Los Angeles, California: Libertyville; Illinois • SWEDEN: Vollsja • SINGAPORE: Singapore City
• SOUTH AFRICA: Rainburg • NEW ZEALAND: Christchurch

MADE IN AUSTRALIA

A.P.C.S.

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CONTENTS

HIGH ACCURACY
PORTABLE SIGNAL SOURCE

FC051
Field Calibrator

The APCS FIELD CALIBRATOR FC051 combines a self-contained process signal source together with a 2-wire transmitter simulator in one pocket size instrument.

Built-in 9V batteries, dry or rechargeable combined with compact size make this calibrator ideal for use in the field - an economical addition to the toolbox of every Instrument Technician.

Designed for maximum accuracy and ease of handling the FC051 features a 3.5 digit, 10mm high L.C.D. display (8) which provides direct read-out of mV or mA in sink or source mode. Output range is 0 - 22mA and 0 - 2200mV with display readability of 0 - 19.99mA and 0 - 1999mV. The display also provides LOW BATTERY indication and a mV sign when in mV output mode.

FC051	Field Calibrator

FAST, ACCURATE
TRANSDUCER
CALIBRATION & TESTING

ACS043
Current Source

The APCS AC CURRENT SOURCE ACS043 provides a very useful, precision AC current source with ample power for rapid testing of AC indicating and measuring instruments, transducers and trip relays.

The ACS043 has been designed for maximum accuracy and ease of handling. Its compact size and light weight make this calibrator ideal for use in the field or moving about the plant workplace.

It features a 3 1/2 digit, 14mm high, LED indicator which provides direct read-out of the AC current.

The flick of a switch provides either 1A, 5A or 10A load independent output and the instrument under test can be quickly checked for linearity with another switch which provides 10%, 50% and 100% of range.

There is also a continuously variable setting for easily adjusting 0–100% of range. The 0.2% accuracy is more than adequate in most applications. Where greater accuracy may be required on a standards laboratory bench, a reference ammeter could be connected in series with the instrument under test.

The ACS043 has a switch selectable output frequency of 50Hz or 60Hz. Other frequencies are available on request.

For automated testing or CT simulation the ACS043 has a 10Vdc control input.

ACS043	Current Source

UNIVERSAL INPUTS

PROGRAMMABLE FUNCTIONALITY

USC701
Universal Signal Conditioner V1

The USC701 is a universal signal conditioner that combines measurement and control functions in a single instrument to provide user selectable solutions for most signal conditioning applications.

The USC701 can be programmed directly using the Access Module or a personal computer. The user can also adjust basic calibration functions such as zero, span and trip point via a function switch and digital encoder accessible on the lid.

The USC701 has a comprehensive range of user selectable hardware options. These include dual analogue inputs, dual digital inputs, current or voltage retransmission, sensor supply and isolated trip relays. A range of analogue or pulse outputs

The USC701 provides a substantial range of software functionality. These include maximum demand control, dual input functions with A*B, A/B, A+B, A-B, largest of A and B, average of A and B, 100 point linearise, PID control, speed measurement, digital filter options, logarithmic functions and many more.

USC701	Universal Signal Conditioner V1

AM702 Access Module clips on for fast easy programming on site

CLIPS ON TO THE USC701 FOR

CONVENIENT ADJUSTMENT ON-SITE

AM702
Access Module

The AM702 plug-on Access Module is menu structured for the selection of input/output/alarm variables and selection of calibration information.

In “Configure Mode” an un-programmed USC701 can be programmed to measure any ac, dc voltage or current, flow probes, phase, VA, temperature sensors (TC, RTD etc) resistance and weight using load cells without any calibration equipment. The measured values can be programmed to control the mA/Voltage output and two relays.

As the USC701 is programmed with the “AM702 Configure Mode” various flags are set within the USC701 in preparation for the “Trim Mode”. This process enables “Trim Mode” access to the programmed sections of the USC701.

The “Trim Mode” is used to change selected parameters for each previously programmed input, output and equation constant to an operating USC701 without disruption to output function. The “Trim Mode” can be used in conjunction with the “USC Config” program to create a customised user interface for each USC701.

The “Display Only” mode occurs when both “Trim Mode” and “Configuration Mode” have been disabled by the “USC Config” PC program this disables all functionally of the AM702 except for the run mode commands.

USC701’s configured or trimmed by the AM702, can have their respective programs “uploaded” to a PC using the ‘Computer Adaptor COA703’ for future record or repeat units.

AM702	Access Module

UP TO 2000V ISOLATION

FIELD PROGRAMMABLE

SI132
Configurable Signal Isolator (v4)

The SI132 is a universal field configurable isolating signal converter providing true 3-way galvanic isolation up to 2000V r.m.s. for standard process signals.

Inputs, outputs and response time are programmable via internal coding plugs. The coding plugs enable a large combination of standard process signals to be isolated and/or converted.

Programming is simply a matter of referring to the table (for programming table see back page or sticker attached to module), unclipping the case and setting the appropriate coding plug. Final calibration is trimmed using the front accessible 'offs' and 'span' 15-turn trim adjustments.

The output signal level is indicated by a green L.E.D. on the front of the module, giving a clear indication of module function, signal presence and loop condition for current outputs.

Various power supply choices are available ranging from 240Vac down to 8dc, all provide power isolation and surge protection.

SI132	Configurable Signal Isolator (v4)

LINK SELECTABLE INPUTS

TARE & EXCITATION ADJUSTMENT

WT127
Strain Gauge Transmitter

The WT127 is a 4-wire transmitter designed for inputs from any type of full bridge strain gauge such as loadcells or piezoresistive devices (pressure sensor).

This transmitter combines an accurate excitation power supply and a millivolt pre-amplifier in one unit. Excitation voltage is front adjustable and will drive up to 4 loadcells in parallel at 10Vdc.

The most common input mV-ranges are user selectable on the amplifier card by coding plugs. Final calibration is trimmed using the front accessible "OFFS" and "SPAN" 15-turn trim adjustments. The "OFFS" adjustment is used for fine tare trim and is non-interacting with the span adjustment if coarse tare is set correctly (tare = zero setting).

The "OFFS" potentiometer can be wired out of the housing on request to provide remote tare adjustment. Front adjustments cover typically ±20% of range. Output signal is indicated by the green L.E.D. on front, which gives a clear indication of module function.

Three user selectable response times including a fast 5mS are available. Response times slower than 500mS are optional. Input to output isolation is also available. RF and power transient protection is standard as it is with all APCS modules.

Various power supply choices are available varying from 240Vac down to 8Vdc, all provide power isolation.

WT127	Strain Gauge Transmitter

COMPACT SIZE

HIGH ACCURACY & FLEXIBILITY

SI231
Signal Isolator V2

The SI231 is a loop powered transmitter that combines signal isolation and conversion in one compact package.

Using SMD (Surface Mount Device) technology the SI231 offers an economical solution combining a large range of options with accuracy and flexibility.

Due to its total width of ~23mm and the 35mm DIN-Rail mounting arrangement the SI231 is ideal for “nestmounting” in field enclosures or as a “space saver” in larger control cabinets. The base unit features link selectability for standard process inputs.

No special tools or components are required for range changing in the field. Reverse or direct action mode is easily changed by solder pads on the base board.

Standard output is 4 - 20mA with a wide supply range of 7.5 to 40Vdc. This enables the SI231 to be used in 12V battery supply in automotive applications.

Other factory set output configurations are 10 - 50 mA loop powered and 0 - 10 mA, 0 - 20 mA or voltage output in 3-wire connection.

Reference for 3-wire connection is the negative supply. Double surge protection is standard with all Series 200 loop powered transmitters to prevent failure due to spikes induced by DC switched inductive loads.

Final calibration is trimmed using the front accessible zero and span 15-turn trim adjustments.

A front mounted L.E.D. and a test socket verify module function and assist in calibration checks without disconnection of output wires, (IN-PROCESS OUTPUT MONITORING).

SI231	Signal Isolator V2

MONITOR DC & RMS AC CURRENTS

UP TO 6000A

DCT247
Current Transducer V4

The DCT247 is for monitoring of DC and true RMS AC currents from 5 to 6000A and provides a standard process signal output.

Internal coding plugs are used to program the output measurement range from 10 to 100% of the CT used. Current is detected by means of a toroidal Hall Effect sensor, providing total isolation and true waveform transfer. This is particularly useful for low voltage systems, where the traditional DC-Shunt method is not acceptable.

To accommodate pulsing current or high harmonic contents the filter constant can be set by coding plugs. The input output and supply are fully isolated.

DCT247	Current Transducer V4

OTHER POPULAR SERIES 200 MODELS

SI236	Auxiliary powered isolator
SSP235	Analogue Signal Splitter
PLS257	Pulse Signal Splitter
WHT290	Watt Hour Transducer
ACT241	AC current Transducer
HVI237	High Voltage Isolator

63.5V TO 415V

UP TO 10A

AWT390
Active Power Transducer V3

The ACTIVE POWER TRANSDUCER AWT390 converts instantaneous power from a 3 phase (3 or 4 wire) unbalanced load system into a standard process signal that is proportional to the measured value.

The DC signal is suitable for driving measurement and/or control equipment either at the measurement point or at a remote location.

Input Voltages of 63.5 to 415V and input currents of 0.5 to 10A can be connected directly to the transducer terminals, or inputs can be connected via external current and voltage transformers.

Internal transformers provide galvanic isolation between, input voltage, input current and power supply circuits. The output signal can be unidirectional, bi-directional or offset.

The output signal level is indicated by a green LED on the front which gives a clear indication of module function.

All units are factory calibrated to customer specifications but can be trimmed to final requirements by the SPAN & OFFSET controls (15 turn trimmers) on the front.

Front adjustments will typically cover 25% of range. Various power supply choices are available ranging from 415Vac down to 8Vdc.

These transducers are Australian designed and manufactured and offer a vast range of input to output combinations. The design is fully solid state - for long term stability. Designed to class 0.2 AS1384-1973 and comply with BS6253 and IEC688.

AWT390	Active Power Transducer V3

ONE THERMOCOUPLE INPUT

> TWIN ISOLATED OUTPUTS

TCS726
Thermocouple Splitter V2

The TCS726 takes one thermocouple input and provides two fully isolated outputs. Both outputs can retransmit the thermocouple or one can produce a linearised process signal (4-20mA) for remote data logging and supervision.

Final calibration can be trimmed by using the front accessible SPAN (S) and ZERO (Z) potentiometers.

The optional alarm point is also set by potentiometer utilising the adjacent test socket.

The voltage at the test socket (referenced to terminal 13) gives a 0-5V trip set range representing 0-100% input.

The wide swing DC/DC converter allows for two power supply ranges: 10-60Vdc (16-42Vac), 80-280Vac (80-300Vdc). Isolation is 2kVr.m.s. between all 5 ports.

Connection is via un-pluggable 8-way screw terminals.

TCS726	Thermocouple Splitter V2

WIDE SENSITIVITY RANGE

WEATHERPROOF HOUSING

LUX510
Lux Transmitter V3

The LUX510 is a loop powered LUX or light intensity transmitter.

The durable polycarbonate enclosure with the protection category of IP65 is ideally suited for stand-alone mounting anywhere in or around unprotected plant equipment.

A gland is provided for output cabling. Standard output is 4 - 20mA with a minimum supply voltage of 6.3V. This enables the LUX510 to be used in 12V battery supply systems. 10 - 50mA loop powered is also available.

Typical applications include curtain control in areas such as greenhouses. Output zero and SPAN adjustment are located on the PC-board.

LUX510	Lux Transmitter V3

CONVENIENT SWITCHPLATE MOUNT

LOW VOLTAGE APPLICATIONS

RLT511
Room Light Transmitter

The RLT511 is a loop powered LUX or light intensity transmitter mounted in a standard HPM Excel style switch plate.

Standard output is 4 - 20mA with a minimum supply voltage of 6.3V. This enables the RLT511 to be used in 12V battery supply systems.

Typical applications include lighting control for building automation and energy management.

RLT511	Room Light Transmitter

VERSATILE OPTIONS

ATTRACTIVE DESIGN

RTT508
Room Temperature Transmitter

The RTT508 is designed for in-door temperature measurement offering an economical price/performance solution.

The electronics are housed in an attractive but unobtrusive beige ABS case. The flow through design allows accurate response of the sensor.

Installation is a simple 3-step process:

(i) Mount PVC backing plate to a vertical surface.

(ii) Insert wires into screw terminals.

(iii) Screw down the housing cover.

Standard is cable entry from back, but side-entry can be achieved by cutting the 4mm base plate.

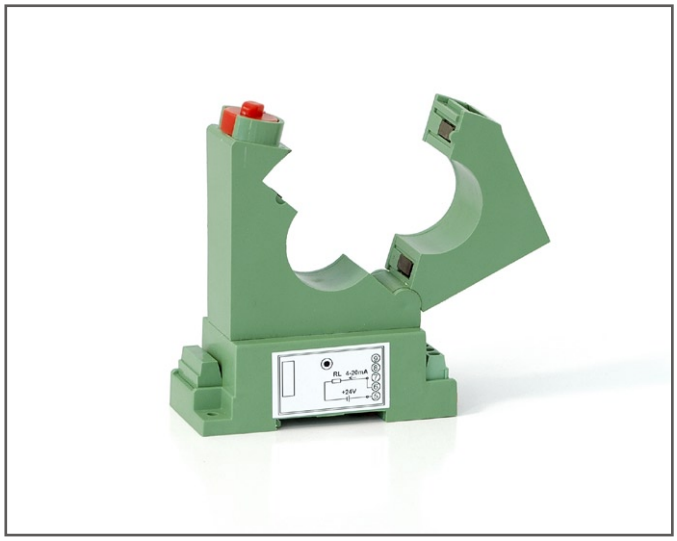
The unit can be ordered in a number of configurations. It can be a 4 - 20mA loop powered transmitter which is capable of running on supplies as low as 6Vdc. It also can be built for 3-wire voltage output.

The 0 - 10V unit will operate with 11.6Vdc supply minimum. All units feature polarity and over voltage protection. Two accuracy classes are available:

· General purpose ±1%

· Increased performance ±0.5%

RTT508	Room Temperature Transmitter



EASY TO USE SPLIT DESIGN

FULLY ISOLATED

SCT011
Split Core Transducer

The loop powered split core current transducer converts an AC current input signal (up to 400A) into a 4-20mA signal. It uses electro-magnetic isolation theory to isolate its output from input, and can well filter the common-mode noise and interference from power lines.

The transducer comes with features including maximum isolation, low drift, wide temperature range and easy installation. There is no need to shut down a live circuit to install the SCT011.

The split core concept facilitates 2-wire connection so that it can be widely used in computer or PLC based measuring and control systems and various automatic systems.

SCT011	Split Core Transducer

VERSATILE & COMPACT DIGITAL INDICATOR

DPM528
Digital Indicator

The DPM528 is a low cost 3 1/2 digit 10mm LCD indicator especially designed for compactness, providing an optimal ratio of digit size and front dimensions: 61 x 35mm.

The total depth is only 74mm which allows this indicator to be mounted into J-boxes or other small enclosures. For larger systems requiring a number of process indications the high stacking density can save valuable front panel space.

This indicator requires a safe 7 - 15V/2mA nominal power supply - giving the added advantage of low power consumption and uniform low level wiring.

The front bezel is hermetically sealed into the front frame to provide a high degree of protection against dust and moisture entry.

The 3 1/2 digit format will give an adequate display format for most process display requirements in good black/grey contrast. This is of importance where the display is subject to bright sunlight.

The decimal point and dimension indications are selected internally by strapping. For field adjustment a 15-turn trim potentiometer is accessible from the rear of the instrument, giving an adjustment range of -75%/+100% of F.S. (100.0 display) for standard inputs.

In the optional loop supplied version (4 - 20mA input) an additional adjustment for the zero point is provided. Screw terminal blocks are provided on the standard version.

For common mode reasons any input must be no higher than (V+) +2V and no lower than (V-) -0.5V than supply voltage.

DPM528	Digital Indicator

LARGE BRIGHT DIGITS 4 DIGIT INDICATOR

DPMD32
4 Digit LED Indicator

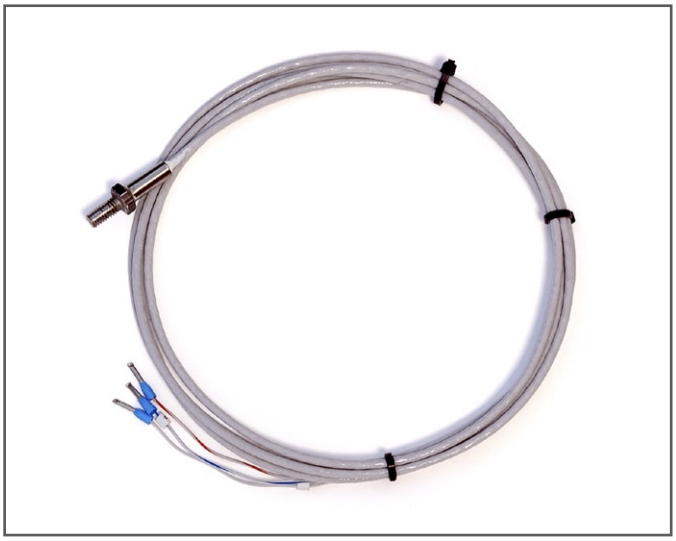
The DPMD32 is a 4 digit plus sign 14mm LED indicator with high and low relay trips.

Designed for mounting into control panels, consoles and other industrial control equipment, the display scaling, decimal point and relay trip points are programmed using the four front mounted buttons.

Access to the programming function is accessible after entering the correct key sequence.

The front size is a DIN-standard 96 x 48mm, which can be easily matched with other DIN-standard instruments or incorporated into 24mm tile-mimic designs. Sturdy screw terminals for power and signal enable easy wiring.

DPMD32	4 Digit LED Indicator



WIDE SENSITIVITY RANGE

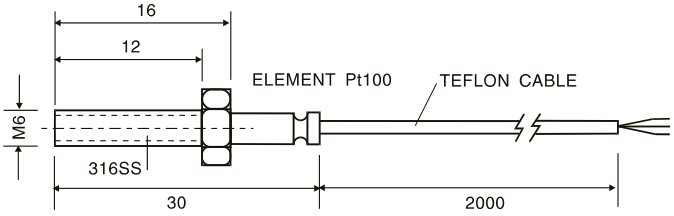
WEATHERPROOF HOUSING

PR507
Threaded Temperature Probe

The PR507 is designed for temperature monitoring applications such as machine surfaces, bearing housings or heatsinks.

The industry standard Pt100 sensor assures long term stability and universal use with most instruments and monitoring equipment.

The sensor is encapsulated into the stainless steel bolt using a high temperature specification resin, providing electrical insulation of up to 500V to the case. This will keep the inputs of the monitoring equipment free from unspecified earth conditions.

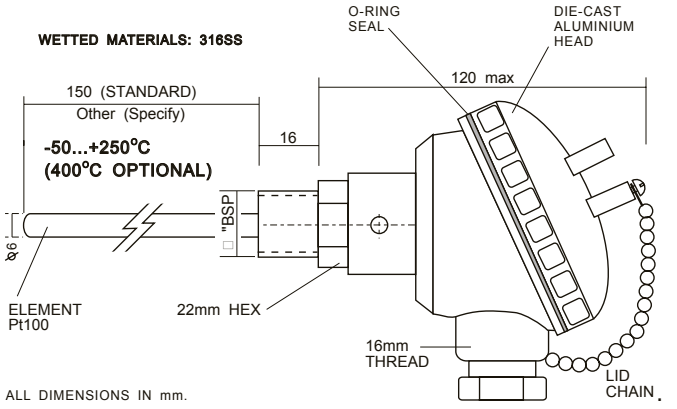


PR507	Threaded Temperature Probe

INDUSTRIAL 316SS HOUSING

DIECAST OR NYLON HEAD

PR505
Temperature Probe Diecast



PR505	Temperature Probe Diecast

PRODUCT SELECTION TABLE

FUNCTION	INPUT	SERIES 100	SERIES 200	SERIES 300/500	SERIES 700
TRANSMITTER / ISOLATOR	LINK-SELECT PROCESS	SI132	SI231,BSI234,SI236		USC701, DSI732
	DC CURRENT OR VOLTS	SI139, BSC133, BSI134, PD121, PD122	SPI232, DSI233, HVI237, SI239, DCT247		DI739,QLPI731, DHI733
	SPLITTER		SSP235		DI739,TCS726
	DC MILLIVOLT	MVT123	MVT223, SI236		USC701, DI739
	SIGNAL LIMITER	SL163			USC701
	AC CURRENT OR VOLTS	ACT141	ACT241, DACT242	MCT306	USC701, DI739
	AC VOLTS	AVT145	AVT245, AVT248	MCT306	USC701, DI739
	AC WATTS	AWT190	WHT290	AWT390	USC701
	AC VAR	ART191		ART391	USC701
	AC VA	AVAT192		AVAT392	USC701
	AC PHASE ANGLE	APT193			USC701
	TAP POSITION	TPT194			USC701
	MAINS FREQUENCY	MFT184			USC701
	FREQUENCY	FRT150,PRM180	FRT250, SI236		USC701, DI739, PFC750
	TEMPERATURE PT100	RTDT125	RTDT225, SI236	TT503, RTT508	USC701, DI739
	TEMPERATURE T/C	TCT126	TCT226, SI236		USC701, DI739
	RESISTANCE 2-WIRE	RT143	RT243, SI236		USC701, DI739
	RESISTANCE POT	RT124,SWT140	SWT240, SI236	SWT540	USC701, DI739
	LVDT	LVDT149			
	CONDUCTIVITY	CDT128	CDT228		CDT728, DI739
	PH / ORP	PHT129	PHT229		DI739
	LOAD CELL	WT127	WT227	WT527	USC701
	VIBRATION	VBT144	VBT244		
	DISSOLVED OXYGEN			DOPI514	
	SOIL MOISTURE				DI739
	INDUCTANCE	INDT148			
	LIGHT			LUX510, RLT511	
	ANALOG TO RESISTANCE	ATR167			
	ANALOG TO POT	ATP168			
	PRESSURE TO CURRENT	PIC176	PIC246		
	RAMPER	RAF185			
	ADD, SUBTRACT	SI139	SI239		USC701, SFI762
	MIN, MAX		SI239		USC701, SFI762
	MULTIPLY, DIVIDE				USC701
	8 CH MULTIPLEXER			EMU305	
	ANALOGUE TO PULSE	LI152, APC153	APC253		USC701
	PULSE TO PULSE	PLS154, PLR155	PLR255,PLS257	PLR555, USC701	
ALARMS	SINGLE CONTACT	STA138, PA101, PA104, ADA174, FRA151, STM156	PA201, DCA218, LLD207,CM270, VPR271, HVR272, PM276, PM277	MCA301	FM801
	DUAL CONTACT	DTA137, PA102	DPA202, DPA203		USC701
	TRIPLE CONTACT	TRA173			
	QUAD CONTACT			MCA301	QAU775, FSM770
TX/ALARMX1		STI136	PA201, FRA251		DSI732,DI739
TX/ALARMX2		DTI135			USC701
TX/ALARMX4					QAU775
POWER SUPPLY	SINGLE CHANNEL	PS108	PS208		
	DUAL CHANNEL	PS109	PS209		

PRODUCT SELECTION TABLE

FUNCTION	TYPE	MODEL
CALIBRATORS	PROCESS - HAND HELD	FC051
	PROCESS -PANEL	LOS405, LOS406
	RTD TEMPERATURE	RTDS053
	AC CURRENT SOURCE	ACS043
DISPLAYS	4-20MA LOOP-POWERED	DPM338, DPM4NS, DPM6502
	OTHER STANDARD DPM	DPMC32, PMD32, DPM6035, DPM430, DPM524
SENSORS / PROBES	WIND SPEED & DIRECTION	MU7911
	RAIN COLLECTOR	RC7852M
	RAIN DETECTOR	RD512
	SOIL MOISTURE	SMS009
	DISSOLVED OXYGEN	DOP014
	ROOM TEMPERATURE	RTT508, TT503
	ROOM HUMIDITY & TEMP	RHT10FT, RHT16, RHT21FT, RHT23FT
	SOLAR RADIATION	SR6450
	TEMPERATURE	PR505, PR506, PR507
	FLUID LEVEL	PR105-1, PR105-2, PR105-3, PR105-4
	PRESSURE	PR2200B
	CONDUCTIVITY	PR128-1, 9-ECS20T
	ACCELEROMETER	PRM608A11, PRM603C01
	PH	PRM10, PRM11
	SHUNT	DCS11
	CURRENT TRANSFORMER	CT004, CT005
	SPLIT CORE CT	SCT007(50A), SCT008(200A), SCT009(600A), SCT012 (100A)
	SPLIT CORE CT + TX	SCT010, SCT011(4-20mA loop-powered)
	HALL EFFECT CT	HCT016(50A), HCT017(100A), HCT018(400A), HCT019(6000A)

The Ness Story

When you choose products from Ness you are selecting from a range of the very best equipment available anywhere in the world. All Ness Designed Security, Automation or Power Control products are manufactured in Australia, by Ness, using the modern technology and techniques which have established Ness as a world class manufacturer.

Ness products have enjoyed significant export success and are currently being used in diverse markets and environments the world over.

A testimony of Ness' commitment to innovation and quality are the eight Australian Design Awards and numerous Industry Achievement Awards won over many years of dedication to quality manufacturing.

This quality and success is a result of the decades of experience out of which grew the Ness philosophy of "With a Sale Comes Support".

Ness Quality Manufacturing

Ness Corporation is accredited to the internationally recognised Quality Standard ISO9001/2000. Meticulous adherence to this standard and our financial commitment to our multi-million dollar manufacturing facility at Seven Hills, NSW is indicative of our commitment to excellence in manufacturing.

For a more detailed insight, visit Ness online at www.ness.com.au and click "About Us".

NESS TRONICS Electronic Assembly

A.P.C.S. A division of NESS ABN 28 069 984 372

NESS CCTV

NESS Integrated Solutions

iCentral™ Intelligent Central Systems

VALET

NESS Security Products Select Dealer

NESS net Networked Video Solutions

NESS IP Access Control

MADE IN AUSTRALIA

ASIAL MEMBER

IICA Institute of Instrumentation Control and Automation Member of the IICA Corporate Associates Program

CEDIA CUSTOM ELECTRONIC DESIGN & INSTALLATION ASSOCIATION Member

NESS CORPORATION

Certified System Quality ISO 9001 NSW Head Office only

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