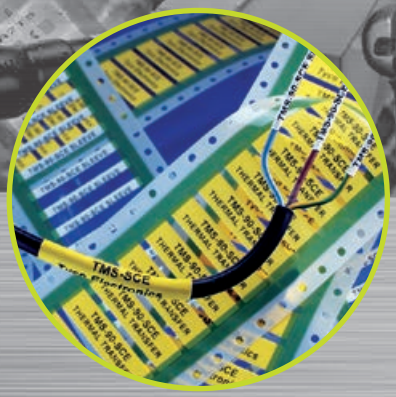
iS Rayfast

Identification

Product Solutions

Labels | Markers | Printing Systems | Software



HIGH PERFORMANCE IDENTIFICATION SOLUTIONS

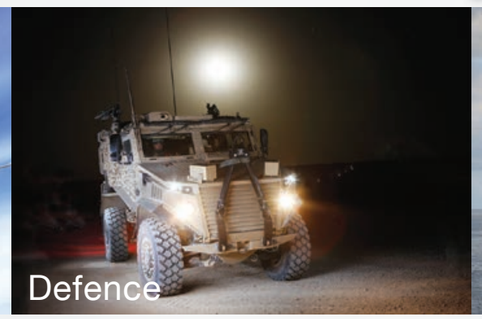
TE connectivity Authorized Distributor

iS Rayfast

- Heat Shrinkable
- Tie-on Cable Markers
- Adhesive Labels
- Hardware & Software
- Pre-print Services

Advanced Identification and Labelling Project Solutions


Aerospace


Defence


Energy


Industrial


Mass Transit


Motorsport

Mechanical Protection | Extreme Temperature Performance
Chemical Resistance | Fluid & Solvent Resistance | Moisture Protection
Strain Relief, Flexibility | Flame Retardant, Low Smoke
High shrink ratio | Low Shrink Temperature | Aesthetic Enhancement
Fast and Efficient Installation.

Identification and labelling products are increasingly important as the preferred method of identification and traceability, for harness wire and cable, control panel and components.

Our product range covers a multitude of styles and materials including heat-shrinkable markers, tie-on, wrap-around and self-adhesive labels that meet international UL, CSA & Mil-Spec specifications. Products can be marked using a range of state of the art thermal transfer printers.

Applications range from commercial component labelling through to high performance critical systems identification. Typical product performance characteristics include extreme temperature operation, zero halogen, low smoke, low toxicity, chemical resistance, abrasion resistant, electrical insulation, strain relief and UV resistance.

Contents

Heat Shrinkable

TMS-SCE	Military Grade
HT-SCE	High Temp, Low Outgassing
RPS	Commercial Grade
HX-SCE	Low Fire Hazard
D-SCE	Fluid resistant
TMS-CCUV	UV Protection Sleeve
UV-SCE	UV Flame Retardant

Tie-on Cable Markers

CM-SCE-TP	Military Grade
HLX125	Low Fire Hazard
PM316	Stainless Steel

Adhesive Labels

SBPlus	Self Laminating
RMK-6	Epoxy Coated
RMK-A4	Epoxy Coated
TTP	Continuous Polyester Decal
MP	Metalised Polyester
WP	White Polyester

Hardware & Software

T200	Printer, plus ribbons
TE3112	Printer, plus ribbons
WinTotal	Software
Printer Ribbons	

Pre-print Services
Added value service provision

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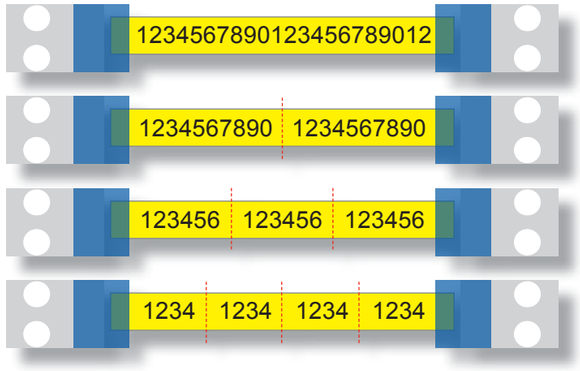
Product	UL	CSA	SAE AS5942	SAE-AMS DTL-23053	Operating Temperature	Size range	Ratio	Thermal	White	Yellow	Black	Clear	Non Std	Pre-Scoring	Description
TMS-SCE	•	•	•	•	-55ºC to +135ºC	2.4mm to 57mm	3:1	•	•	•			•	•	Mil Spec
HT-SCE	•		•		-55ºC to +225ºC	2.4mm to 38mm	2:1	•	•		•			•	High temperature, low gas
RPS	•	•	•		-30ºC to +105ºC	3.2mm to 38mm	3:1	•	•	•				•	Commercial
HX-SCE			•		-30ºC to +105ºC	2.4mm to 38mm	2:1	•	•	•			•	•	Low fire hazard
D-SCE			•	•	-55ºC to +135ºC	3.2mm to 38mm	3:1	•		•			•	•	Fluid resistant
UV-SCE	•				-55ºC to +200ºC	2.4mm to 38mm	2:1	•	•	•				•	UV and fire retardant
TMS-CCUV	•	•		•	-55ºC to +150ºC	3.2mm to 38mm	2:1					•			UV resistant, clear

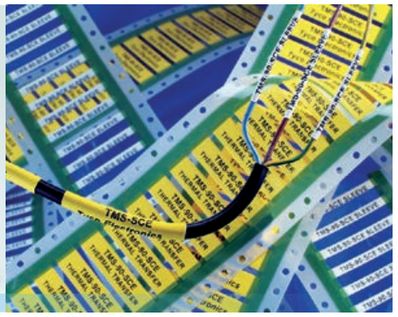
Pre-scoring Variants

IS-Rayfast offer a number of marker sleeves in four standard lengths of 50mm, 25mm, 16mm and 12.5mm. Our in-house ability to score sleeves as identified in the table above means we can secure the product you require when required. For non-standard lengths please contact us.

- Un-scored sleeve
- S1 Scored sleeve for 2 x 25mm sleeves
- S2 Scored sleeve for 3 x 16mm sleeves
- S3 Scored sleeve for 4 x 12.5mm sleeves

The example shows a approximate full size representation, using 11 point Arial font of the four standard variants.





TMS-SCE Military Grade

Used to identify wire and cable in high performance military, aerospace and commercial applications. Made from a durable polyolefin that meets military standards. Supplied in a flat 'ladder' format for ease of printing.

Approvals to
SAE AS 81531 4.6.2 (mark permanence)
MIL-STD-202F Method 215J (solvent resistance)
SAE-AMS-DTL-23053/5 class 1 & 3
UL-224 (File 35586)
NSA 937201 Type MR & MT
BMS13-69 Grade A & B

Operating Temperature -55ºC to +135ºC

HT-SCE High Temperature

Used to identify wire and cable in environments with high operating temperatures and are highly resistant to fuels, lubricants and solvents. Also ideal where low-vacuum outgassing is critical.

Approvals to
SAE AS5942 (print adherence)
MIL-STD-202F Method 215J (solvent resistance)
UL-224 VW-1 rated
Low outgassing 1% max TML, 0.1% max VCM
NSA 937201 Type MK & ML
BMS13-69 Grade C & D

Operating Temperature -55ºC to 225ºC

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Heat Shrinkable Markers

RPS Commercial

RPS markers are heat-shrinkable marker sleeves for general industrial applications. Resistant to abrasion, aggressive cleaning solvents and industrial fluids.

Approvals to
SAE AS 81531 4.6.2 (mark permanence)
MIL-STD-202 Method 215J (solvent resistance)
UL 224 (file E35586)
CSA Certified (file 31929)

Operating Temperature -30ºC to 105ºC

D-SCE Fluid Resistant

Suitable for applications where exposure to organic fluids, especially oils, is required. Designed to operate in these conditions at elevated temperatures for extended periods, making them ideal for rail and construction industries.

Approvals to
AMS AS5942 4.1 (print adherance)
MIL-STD-202G method 215 (solvent resistance)
SAE-AMS-DTL-23053/6 Class 1
EN50343 (Appendix H)
SNCF NF F 00608 (Cat. A & H)

Operating Temperature -55ºC to +135ºC

HX-SCE Halogen Free

Ideal for applications where limited fire hazard characteristics are necessary. The zero halogen material coupled with low smoke and low toxic fume emissions make the product ideal for use in enclosed spaces such as mass transit, marine and industrial installations.

Approvals to
SAE AS5942 (print adherence)
MIL-STD-202G method 215 (solvent resistance)
EN45545-2 'Hazard Class 3' Req. set R22/R23
LUL 1-085 A3 (fire performance)
NF F 16-101 (Class A1)
BS 6853 (1999) Cat 1a
LUL E1042:A6 [2002]
EN 50343 Appendix H (Diesel immersion removed)

Operating Temperature -30ºC to +105ºC

TMS-CCUV UV Clear

Designed to provide increased protection for identification products in outdoor applications. The clear heat-shrinkable sleeves provide a barrier to the effects of ultraviolet (UV) radiation and tough resistance to abrasion and fluids.

Approvals to
UL VW-1 rated
SAE AMS DTL 23053/18, Class 2

Operating Temperature -55ºC to 150ºC

UV-SCE UV Colour

Offers extreme resistance to Ultra Violet (UV) and harsh weather conditions. Offering outstanding physical performance, mark permanence and legibility after 25,000 hours of UV and moisture exposure, without degradation.

Approvals to
IEC 60068-2-5, procedure B
NFT 46-019, method A
BS EN 60068-2-11
UL 224 VW-1

Operating Temperature -55ºC to 200ºC

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Tie-on Cable Markers

Product	Flat label	SAE AS5942	SAE-AMS DTL-23053	EN45545-2	Operating Temperature	Size (mm)	Thermal Print	Standard Colours			Non Standard Colours. Please ask for options	Description
								Metal	White	Yellow		
CM-SCE-TP	•	•		•	-55°C to +135°C	10.4 x 51.4 and 51.5 x 20.3	•		•	•	•	Polyolefin
HLX125	•	•	•		-40°C to +105°C	80 x 12.5	•		•	•	•	Zero halogen
PM316	•				-80°C to +500°C	95 x 12	n/a	•				Stainless Steel

CM-SCE-TP Polyolefin

These non adhesive labels can be used to identify large cables and wire bundles in particularly aggressive environments. Can be applied post cable termination using cable ties.

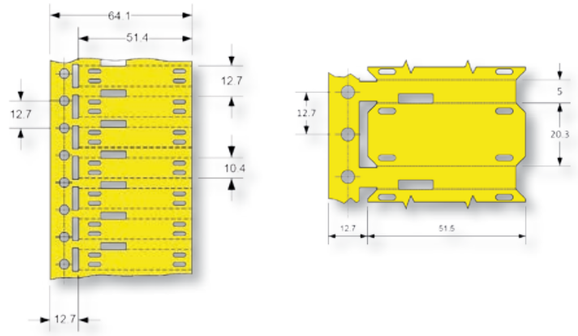
Manufactured using specially developed radiation cross-linked flame retarded polymer. Typical installation include mass transit, military and aerospace.

Key Features

- Highly flame resistant, offering excellent resistance to burning with oxygen index of 35%.
- Resistant to key industrial and military grade fluids, as defined by RW-2513.
- The cable marker, including print, does not promote mould growth (ASTM G21 / 28 days - zero rating).

Approvals to
SAE AS8 1531 4.6.2 (mark permanence)
MIL-STD-202F Method 215J (solvent resistance)
EN45545-2 'Hazard classification 3' set R24
UL MH26328 Group PG1S2

Operating temperature -55°C to +135°C



HLX125 Zero Halogen

These leading edge cable markers are made from LFH material for low smoke, low toxicity and zero halogen applications. These markers are attached to cables, bundles and larger wire by cable ties.

Approvals to
SAE AS81531 4.6.2
MIL-STD-202F Method 215J
UL 224 (clause 14)
ASTM D 2671
BS 4G 198 Part 3

Operating Temperature -40°C to +105°C

PM316 Metal

Permark® 316 stainless steel markers are recomended for use in highly demanding applications. Using state of the art technology and no inks, the marking process produces a permanent, deep surface mark with a darkened character in high contrast to the background. Pre-print service option only.

Offering excellent resistance to a variety of hydrocarbons, organic chemicals, acids, alkalis and inorganic salts.

Operating temperature -80°C to +500°C

Adhesive Labels

Product	Flat label	UL	CSA	SAE-AMS DTL-23053	Operating Temperature	Size	Ink Jet	Thermal	Standard Colours			Non Standard Colours. Please ask for options	Description
									White	Metalised	Clear		
SBP	•			•	-51°C to +93°C	Various		•	•			•	Self-laminating
RMK-6	•		•		-40°C to +105°C	Various			•				Printable, see note
Raymark A4	•				-40°C to +105°C	Various	•		•				Inkjet printable
TTP	•	•	•	•	-29°C to +150°C	n/a		•	•	•	•	•	Polyester
MP	•	•	•	•	-40°C to +150°C	Various		•		•			Metalised polyester
WP	•	•	•	•	-40°C to +150°C	n/a		•	•				Polyester

SBPlus Self-laminating

Clear vinyl film with a permanent acrylic based adhesive, supplied with a white thermal transfer printable area which is over-laminated upon application with clear portion of the label. Can also be 'flagged' around a wire rather than wrapped.

Operating temperature -51°C to +93°C

TTP Polyester

This highly durable system offers the feature of 'Silk Screened' labels only without the cost, time and inflexibility involved. The product utilises high performance polyester with permanent adhesive, suitable for panel labels, facias and decals.

Approvals to
A-A-59485 | GAT 100BB | UL MH17292 Group PGJ12

Operating temperature -40°C to +150°C.

MP Metalised Polyester

Thermal transfer printable metalised polyester film with permanent acrylic adhesive. Designed for rating plates and other applications that require a metal look such as: nameplates, equipment labels, detailed product information labels and serial number plates.

Approvals to UL MH17292 Group PGJ12 and CSA certified

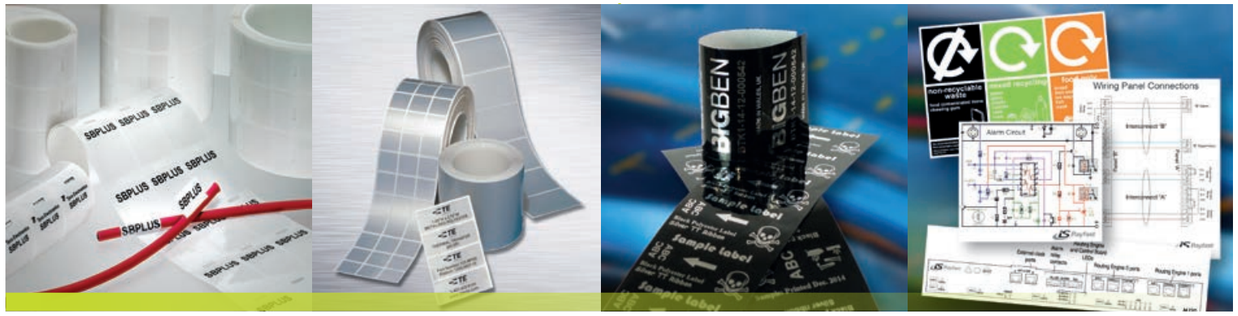
Operating temperature -40°C to +150°C.

WP White Polyester

Printable white polyester film with a permanent acrylic adhesive. Ideal for bar coding, PCB & component labelling, as well as general purpose labelling that require a high durability white label. WP is resistant to a variety of solvents while maintaining print quality.

Approvals to UL MH17292 Group PGJ12.

Operating temperature -40°C to +150°C.



RMK-6 Self Print Epoxy

Computer printable label with outstanding fluid and abrasion resistance, designed for dot matrix printers (Epson LQ590 and LQ590 Ribbon), please contact us for inkjet version. Similar to RMK-A4 but supplied on a roll in various widths, the heat reactive epoxy "locks-in" the printed image post heating.

Approvals to
MIL-M-81531 (mark permanence)
MIL-STD-202F method 215 (solvent resistance)

Operating temperature -40°C to +105°C (panel marking)

RMK-A4 Self Print Epoxy

A computer printer label stock with outstanding fluid and abrasion resistance, for inkjet printers. When heat-cured after printing, the heat reactive epoxy surface "locks-in" the printed image. Typical applications are rating plate labels, wiring diagrams, component identification and wraparound markers.

Approvals to
MIL-M-81531 (mark permanence)
MIL-STD-202F method 215 (solvent resistance)

Operating temperature -40°C to +105°C (panel marking)

Printers Thermal Transfer

T200 Printer

A complete solution for your essential thermal transfer printing needs. The accuracy and flexibility of a movable media sensor extends the variety of products approved for this printer, while reducing the number of misprints.

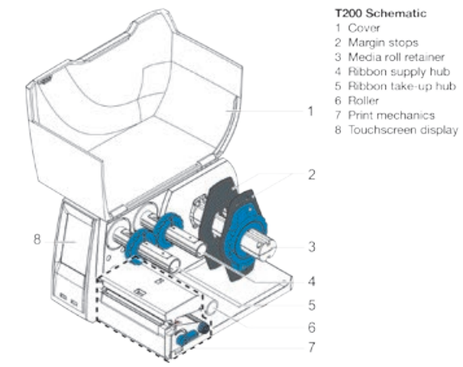
Key Features & Benefits

- Desktop unit, light-weight and portable.
- Compact size 322mm x 253mm x 189mm.
- Automatic calibration.
- Simple ribbon and media loading procedure.
- Cutter and perforator option.
- Interfaces include USB 2.0 and LAN 10/100.

Specifications

- CE, FCC Class A, CB, CCC, UL, GOST

For your thermal printer ribbons please contact us for details.



T200 Schematic
1 Cover
2 Margin stops
3 Media roll retainer
4 Ribbon supply hub
5 Ribbon take-up hub
6 Roller
7 Print mechanics
8 Touchscreen display

Ordering Information	
Standard printer	T200-IDENT-PRINTER
Printer with WINTOTAL	T200-IDENT-SWARE-PRINTER
Other accessories available include printhead, driveroller, cutter and perforator.	

TE3112 Printer

The TE3112 printer is a mid-range identification printer for marking heat-shrinkable marker sleeves, cable markers and labels. With a 300 dpi print head, it's capable of marking a broad range of products for use in commercial and industrial environments. Robust design for 24 hour duty cycle.

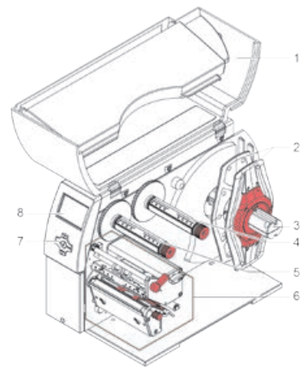
Key Features & Benefits

- High accuracy printing.
- Light-weight and small footprint.
- Automatic calibration.
- Centre justification.
- Easy to fit accessories.

Specifications

- CE, FCC Class A, CB, CCC, UL, GOST

For your thermal printer ribbons please contact us for details.



TE3112 Schematic
1 Cover
2 Margin stops
3 Roll retainer
4 Ribbon supply hub
5 Ribbon take-up hub
6 Print mechanics
7 Navigator pad
8 Display

Ordering Information	
Standard printer	TE3112-PRINTER
Other accessories available include printhead, media sensor, driveroller, cutter and perforator.	

Both the T200 and TE3112 thermal printers offer 300dpi resolution printing which when combined with the recommended media and thermal transfer ribbons meet the most rigorous of industry standards in resolution and mark permanence.

WinTotal Software

WinTotal is a label/marker design package. Running in the familiar Windows environment, WinTotal features a highly graphical user interface to simplify operator training and application.

Pre-loaded with all of the TE Connectivity identification and labelling products, including: heat-shrinkable sleeves, continuous products, cable markers, self-laminating labels and plain labels.

Key Features & Benefits

- Multi-lingual user interface.
- Pre-loaded WYSIWYG templates.
- Graphical user interface with WYSIWYG display
- Clipart gallery with commonly used symbols (V6 only).
- Incremental alpha and numeric fields.
- Accepts and prints data in numerous languages - UniCode data support (V6 only).
- Multiple Label Design Objects: Text, lines, boxes, circles and images.
- Double sided marker printing complete with WYSIWYG display.
- Extensive Barcode and 2D barcode support.
- Advanced label design elements & tools: Text boxes, rich text formatting, variable font size.
- Image files supported (JPG, WMF, BMP).
- Multiple Printers/Printing: Full MAPP (Multiple Application Port Printing). Able to drive multiple printers simultaneously with automatic selection via product or dataset.

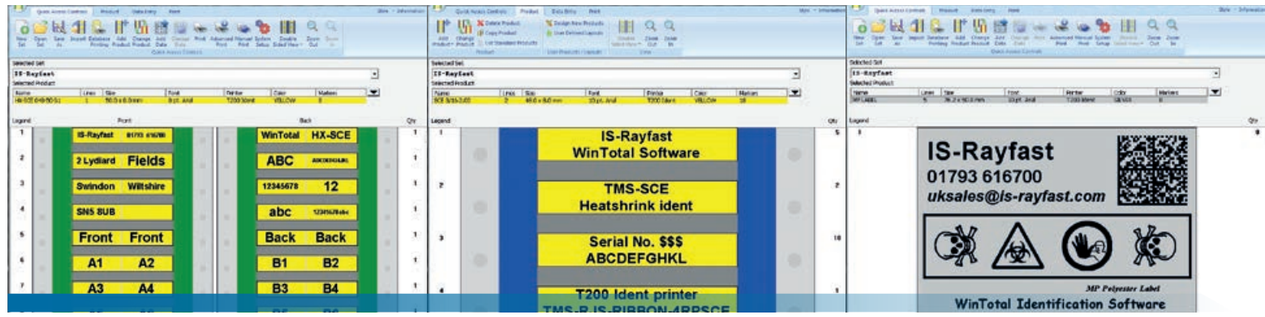
Basic Functionalities

- Toolbar design, 'Keypad' buttons, 'Zoom In/Out' functions.
- 'Selected Product' list box
- Simplified user interface configurable for both basic and advanced users
- Single file data format: One file now replaces multiple files used in older versions (old structure still supported).
- 'System Setup' screen with simplified printer selection: 'Advanced Printer Setup' function shows all settings in one location.

Data Management

- Import data from ASCII or XMT files or from a Windows database
- 'Database printing' function for printing data without importing into WinTotal software
- 'Preview' option to review the import configuration without importing.

System Requirements	
Computer	IBM Compatible PC
Processor	1 GHz or higher
RAM	1GB
Screen Resolution	1024 x 768 pixels
Disk Space Required	100MB of free disk space



The WinTotal software package is available to suit a Windows® environment and is constantly being developed in line with operating system updates and technology improvements, please enquire for latest release levels.

Specialist Provider of Custom Solutions for Identification and Labelling Projects

Thermal Printer Ribbons

Cross Ref Ribbon/Product

It is essential that the combination of printers, products and ribbons are correct, to ensure the best print quality and mark permanence. Each combination has been evaluated for print quality and tested for mark permanence. The table below illustrates the standard ribbons available by product and against printer type.

For more information or guidance and alternative solutions please contact us.

	Compatible Products	Standard Ribbon
Markers	CM-NMX	1330-3300-10
	CM-SCE-TP	1966-RIBBON
	D-SCE	1966 RIBBON (for superior performance)
	HLX125	1966-RIBBON
	HS	1966-RIBBON (for superior performance)
	HT-SCE	TMS-RJS-RIBBON-4HT
	HT-SCE (Black)	T300-RIBBON-WH-4HT
	HX / HX-SCE	1966-RIBBON
	Multimark	TMS-RJS-RIBBON-4RPSCE
	RPS	TMS-RJS-RIBBON-4RPSCE
	NBC-SCE	TMS-RJS-RIBBON-4HT
	TMS-SCE	TMS-RJS-RIBBON-4RPSCE
	TMS-SCE (Black)	T300-RIBBON-WH (White) or TMS-RJS-RIBBON-4AG (Silver)
	TMS-90-SCE	1966-RIBBON
	UV-SCE	T300-UV-SCE-RIBBON
Labels	Decals (TTP)	1330-0607-10
	Destructible Polyethylene (TN)	1330-0607-10
	HPK	1330-0607-10
	Kapton® Polyamide (T1K/T2K)	1330-0619-10
	Nylon cloth (NC)	1330-0607-10
	Paper (EP)	1330-0600-10
	Polyesters (WP/MP/CP/HW/HM/MV/HMM)	1330-0607-10
	SBP	TMS-RJS-RIBBON-4RPSCE
	Tedlar® Polyvinyl Fluoride (TTVF/PVF)	1330-3300-10
	White Vinyl (WV)	1330-0607-10

EC9926-000 Universal Payoff

The Universal Payoff is a free standing bench top, or wall mounted stand. Designed to dispense all TE Connectivity (TE) identification marker sleeves, cable markers and labels.

Key Features & Benefits

- Free standing bench top
- Wall mountable for space saving
- Robust, all metal stand
- Maximum outside roll diameter 400mm
- Size 300(D) x 2329(H) x 200(W) millimetres
- Weight 2.23kg

Pre-print Services

We have a full electronic capability, to receive and manipulate customer files for printing. Printing capabilities include logos, barcodes, images and a full range of text fonts.

Working closer with our customers providing practical design solutions, full technical support, site visits, system demonstrations and after sales support. Our in-house design and printing capabilities include a full range of text fonts, sequential numbering, logos, barcode, images and personalised graphics.

Heat Shrinkable Sleeves
Metal Photo Labels
Tie-on Cable Markers
Custom Self-adhesive Labels
Tubing Pre-cut & Printed
Engraved Materials
Complete Sets and Kits
Barcodes and Logos

Custom designed solutions is an area of particular interest to our customers for their bespoke identification needs. Where awkward shapes or harsh environments require a particular specialist solution, such as;

- Ruggedised label applied to contoured surface that needs to withstand mechanical abrasion, environmental weathering, plus chemical solvent abuse.
- Metalised permanent adhesive labels that evidence tampering.
- Control switch panel foil for external application, to withstand UV.
- Etched identification diagrams on various substrates for permanent environmental withstand.

For further information on the Pre-print service capabilities available or to discuss your specific labelling requirements, please contact us.

Specialist Provider of Custom Solutions for Identification and Labelling Projects

Specialist Distributor of High Performance Electrical Interconnect & Electro-Mechanical Components and Services.

Working closely with suppliers and manufacturers worldwide we offer a comprehensive range of high performance components and associated products for the Aerospace, Defence, Energy, Industrial, Medical and Motorsport markets. Our experienced team includes specialists by sector and by product, to provide leading customer service. With immediate access to in excess of 8,000 product lines from an extensive “off the shelf” stock profile for next day delivery as standard, along with flexible MOQ’s and pack sizes.

We are fully committed to complying with the latest quality approvals for the customers and markets we serve, including ISO9001:2008 and AS9120:2005.

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