

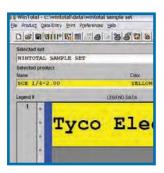
## **PRINTERS**

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### **T107M Handheld Printer**

The new T107M from Tyco Electronics is perfect for the professional user who needs an affordable label printer for on-site applications that's tough and easy to use. Contractors, panel builders and facility managers will save time and money by using the special Hot Keys that provide labels at the touch of a button including wire and cable wraps, module marking, fixed length, serialization, vertical printing, barcodes, symbols and much more.

The T107M offers clear, smudge-free high-performance labels that stick permanently to a variety of surfaces and provides remarkable MIL-spec print permanence on Heat Shrink Tubing. Print media is offered in easy-to-load cassettes and includes an optimized ribbon and choice of material: Heat-Shrink, Nylon Cloth, Vinyl, Polyester, and Polypropylene labels.



#### **Printer Specifications**

Printing Method Thermal Transfer Printhead (180 dpi) Dimensions 70 mm L x 114mm W x 212mm H

Printer Weight 519g Keyboard ABC layout

> To access international characters: Rapid Accented Character Entry, according to the

mobile phone principle.

LCD Display 2 lines

Rechargeable battery pack life indicator

Printer Kit - US power adaptor included

Printer Kit - UK power adaptor included

Display backlighting

Operating conditions Temperature: 4°C to 40°C (39°F to 104°F)

Humidity: 10% to 90% RH

Storage conditions Temperature: 0°C to 90°C (32°F to 194°F)

Humidity: 10% to 90% RH

#### **Product Order Code**

T107M-SMS-PRINTER-KIT-US T107M-SMS-PRINTER-KIT-UK T107M-SMS-PRINTER-KIT-EU T107M-SMS-PRINTER-KIT-AUZ T107M-SMS-PRINTER-KITASI T107M-SMS-PRINTER-US T107M-SMS-PRINTER-EU SMS-US-A/C-ADAPTOR SMS-EU-A/C-ADAPTOR SMS-ASIA-A/C-ADAPTER SMS-AUZ-A/C-ADAPTOR SMS-BATTERY-PACK SMS-CARRY STRAP

Hard case

Description

Printer Kit - European power adaptor included Printer Kit - Australia power adaptor included Printer Kit - Asia power adaptor included Printer Only (US) Printer Only (European) US A/C power adaptor European A/C power adaptor UK & Asia A/C power adaptor Australian A/C power adaptor Rechargeable battery pack Soft carry strap

#### **Printer Kit Contents**

SMS-PRINTER-HARDCASE

Printer

Rubber protection bumper

User guide

Six (6) AA batteries

Power adaptor

Hard carry case

One (1) 19mm white flexible nylon tape printer cassette

One (1) 9mm yellow heat-shrinkable tubing printer cassette

See page 136 for available printer cassettes and ordering information.



### **T107M Handheld Printer Cassettes**

### **Ordering Infornation**

#### T107M Cassettes

Material	Cable Dia mm	imeter <i>inches</i>	Length m	Shrink Radio	Color	Technical Datasheet
Heat-shrink tubing	1.18 - 2.33	0.05 - 0.09	1.5	3:1	Yellow	TTDS-122
Heat-shrink tubing	1.18 - 2.33	0.05 - 0.09	1.5	3:1	White	TTDS-122
Heat-shrink tubing	1.73 - 3.73	0.07 - 0.15	1.5	3:1	Yellow	TTDS-122
Heat-shrink tubing	1.73 - 3.73	0.05 - 0.15	1.5	3:1	White	TTDS-122
Heat-shrink tubing	2.97 - 5.13	0.12 - 0.20	1.5	3:1	Yellow	TTDS-122
Heat-shrink tubing	2.97 - 5.13	0.12 - 0.20	1.5	3:1	White	TTDS-122
Heat-shrink tubing	4.64 - 8.70	0.18 - 0.34	1.5	3:1	Yellow	TTDS-122
Heat-shrink tubing	4.64 - 8.70	0.18 - 0.34	1.5	3:1	White	TTDS-122
Material	Widt mm	th inches	Length m		Color	Technical Datasheet
Nylon Cloth	12	0.47	3.5		Yellow	TTDS-123
Nylon Cloth	12	0.47	3.5		White	TTDS-123
Nylon Cloth	19	0.75	3.5		White	TTDS-123
						TTDS-124
Non-adhesive tag	9	0.35	5.5		White	TTDS-124
Colored vinyl	12	0.47	5.5		Yellow	TTDS-125
•						TTDS-125
Colored vinvl		0.75	5.5		Red	TTDS-125
Colored vinyl	19	0.75	5.5		Yellow	TTDS-125
Colored vinyl	19	0.75	5.5		Green	TTDS-125
Colored vinyl	19	0.75	5.5		White	TTDS-125
Polyester	9	0.35	5.5		White	TTDS-126
Polyester	12	0.47	5.5		White	TTDS-126
Polyester	12	0.47	5.5		Metalized	TTDS-127
Polyester	19	0.75	5.5		Metalized	TTDS-127
Polyester	12	0.47	5.5		Clear	
		0.75			Clear	
	Heat-shrink tubing Material Nylon Cloth Nylon Cloth Nylon Cloth Nylon Cloth Colored vinyl Polyester Polyester Polyester	Material         mm           Heat-shrink tubing         1.18 - 2.33           Heat-shrink tubing         1.73 - 3.73           Heat-shrink tubing         1.73 - 3.73           Heat-shrink tubing         2.97 - 5.13           Heat-shrink tubing         4.64 - 8.70           Heat-shrink tubing         4.64 - 8.70           Heat-shrink tubing         4.64 - 8.70           Material         mm           Nylon Cloth         12           Nylon Cloth         12           Nylon Cloth         19           Non-adhesive tag         6           Non-adhesive tag         9           Colored vinyl         12           Colored vinyl         12           Colored vinyl         19           Colored vinyl         19           Colored vinyl         19           Colored vinyl         19           Polyester         9           Polyester         9           Polyester         12           Polyester         12           Polyester         12           Polyester         19	Heat-shrink tubing         1.18-2.33         0.05-0.09           Heat-shrink tubing         1.73-3.73         0.07-0.15           Heat-shrink tubing         1.73-3.73         0.05-0.15           Heat-shrink tubing         2.97-5.13         0.12-0.20           Heat-shrink tubing         2.97-5.13         0.12-0.20           Heat-shrink tubing         4.64-8.70         0.18-0.34           Heat-shrink tubing         4.64-8.70         0.18-0.34           Material         mm         inches           Nylon Cloth         12         0.47           Nylon Cloth         12         0.47           Nylon Cloth         19         0.75           Non-adhesive tag         6         0.24           Non-adhesive tag         9         0.35           Colored vinyl         12         0.47           Colored vinyl         19         0.75           Colored vinyl         19         0.75           Colored vinyl         19         0.75           Colored vinyl         19         0.75           Polyester         9         0.35           Polyester         12         0.47           Polyester         12         0.47	Material         mm         inches         m           Heat-shrink tubing         1.18-2.33         0.05-0.09         1.5           Heat-shrink tubing         1.18-2.33         0.05-0.09         1.5           Heat-shrink tubing         1.73-3.73         0.07-0.15         1.5           Heat-shrink tubing         2.97-5.13         0.12-0.20         1.5           Heat-shrink tubing         2.97-5.13         0.12-0.20         1.5           Heat-shrink tubing         4.64-8.70         0.18-0.34         1.5           Heat-shrink tubing         4.64-8.70         0.18-0.34         1.5           Material         mm         width         Length           Material         mm         mm         Length           Mylon Cloth         12         0.47         3.5           Nylon Cloth         12         0.47         3.5           Nylon Cloth         19         0.75         3.5           Non-adhesive tag         6         0.24         5.5           Non-adhesive tag         9         0.35         5.5           Colored vinyl         12         0.47         5.5           Colored vinyl         19         0.75         5.5	Material         mm         inches         m         Radio           Heat-shrink tubing         1.18 - 2.33         0.05 - 0.09         1.5         3:1           Heat-shrink tubing         1.18 - 2.33         0.05 - 0.09         1.5         3:1           Heat-shrink tubing         1.73 - 3.73         0.07 - 0.15         1.5         3:1           Heat-shrink tubing         1.73 - 3.73         0.05 - 0.15         1.5         3:1           Heat-shrink tubing         2.97 - 5.13         0.12 - 0.20         1.5         3:1           Heat-shrink tubing         4.64 - 8.70         0.18 - 0.34         1.5         3:1           Heat-shrink tubing         4.64 - 8.70         0.18 - 0.34         1.5         3:1           Heat-shrink tubing         4.64 - 8.70         0.18 - 0.34         1.5         3:1           Material         Image: Middle of the color o	Material         mm         inches         m         Radio         Color           Heat-shrink tubing         1.18 - 2.33         0.05 - 0.09         1.5         3:1         Yellow           Heat-shrink tubing         1.73 - 3.73         0.05 - 0.09         1.5         3:1         White           Heat-shrink tubing         1.73 - 3.73         0.05 - 0.15         1.5         3:1         Yellow           Heat-shrink tubing         2.97 - 5.13         0.12 - 0.20         1.5         3:1         Yellow           Heat-shrink tubing         2.97 - 5.13         0.12 - 0.20         1.5         3:1         White           Heat-shrink tubing         4.64 - 8.70         0.18 - 0.34         1.5         3:1         Yellow           Heat-shrink tubing         4.64 - 8.70         0.18 - 0.34         1.5         3:1         White           Heat-shrink tubing         4.64 - 8.70         0.18 - 0.34         1.5         3:1         White           Heat-shrink tubing         4.64 - 8.70         0.18 - 0.34         1.5         3:1         White           Material         mm         inches         Inches         Inches         Inches         Inches         Inches         Inches         Inches         Inches         I

### T200 Series portable thermal transfer printers

The T200 series of printers are portable/desktop thermal transfer printers with a 4.1" print head offering an economical option for low volume customers who want to take advantage of thermal transfer printing technology. Their small, light weight design makes them ideal for applications requiring portability or in environments with multiple workstations where space is limited.

The T208M has a 200 dpi printhead; the T212M has a 300 dpi printhead for crisp, high quality text, barcodes and graphic images. Both printers are designed for use with Tyco Electronics range of TMS heat shrinkable wire marker sleeves and limited thermal transfer printable pressure sensitive label products.

T200 series printers are available with optional label spindle accessory. It externally holds a roll of labels on 3" core for easy dispensing.



#### **Printer Specifications**

Tyco Electronics T208M-TTDS-011 T212M-TTDS-064

Print head width 104mm (4.09")

 Print head resolution
 T208M: 8dpmm (203 dpi)

 T212M: 12dpmm (305 dpi)

 Print speed (maximum)
 51mm/sec (2 inch/sec)

Media sensor Transmissive (fixed)

Reflective (fixed)

Memory T208M: 256KB SRAM and 512KB Flash

T212M: 512KB SRAM and 1MB Flash

Communication interface Parallel (Centronics), serial (RS232),

and USB

Printer dimensions 200mm W x 247mm D x 171mm H

(7.9" W x 9.75" D x 6.75" H)

Printer weight 1.81 kg (4 lbs)
Shipping weight 4 kg (9 lbs)

#### **Media Specifications**

 Maximum print width
 104mm (4.09")

 Maximum media width
 118mm (4.65")

 Minimum media width
 28mm (1.12")

 Maximum media roll diameter
 127mm (5.0")

 Media core diameter
 25mm (1.0")

 Ribbon wind
 Ink side out

#### Product Order Code

T208M-PRINTER T208M thermal printer - standard
T208M-C-PRINTER T208M thermal printer - cutter option
T212M-PRINTER T212M thermal printer - standard
T212M-C-PRINTER T212M thermal printer - cutter option
T200-LABEL-SPINDLE External label roll holder for T200 printers

Description

Only the T212M printer is recommended when printing size 3/32 (2.4mm) marker sleeves.

www.tycoelectronics.com

### T300 Series High performance, cost effective thermal transfer printers

Print head width

The T300 series printers are high performance, yet cost effective thermal transfer printers with a 4.1" printhead. The rugged and durable all metal construction makes them suitable for demanding industrial and commercial environments. The enhanced memory and 32 bit processor provide fast data processing and print speeds. Optional accessories are available for added convenience and efficiency.

The T308S and T308SN have a 200 dpi printhead for use with the Tyco Electronics range of thermal transfer printable pressure sensitive label products. The T308SN provides network capability for real time connectivity with the printer. With such connectivity, print jobs can be modified from any location over the Internet via Web-based tools. The T308SN printer is also capable of sending alerts via email enabled wired or wireless devices.

The 300 dpi printhead on the T312S, T312M and T312Z produces crisp, high quality text, barcodes and graphic images. The T312S and T312Z are for use with Tyco Electronics thermal transfer printable pressure sensitive label products. The color-coded operator cues and auto-calibration features make T312Z an affordable yet easy to use label printing system. The T312M is designed for use with Tyco Electronics TMS and HSI wire marker sleeves, as well as thermal transfer pressure sensitive label products.



#### **Printer specifications**

Tyco Electronics T308S-TTDS-054
T312M-TTDS-066
T3127-TTDS-115

T312Z-TTDS-115 104mm (4.09")

Print head resolution T308S: 8dpmm (203 dpi)

T312M/T312S/T312Z\*: 12dpmm (305 dpi)

Print speed (maximum) T308S/T312M/T312S: 203mm/sec

(8 inch/sec)

T312Z\*: 154mm/sec (6 inch/sec)

Media sensor Transmissive - adjustable

Reflective (fixed)

Memory T308S/T312M/T312S: 6MB DRAM and

2MB Flash

T308SN: Additional 8MB flash memory

in PCMCIA socket

T312Z\*: 4MB DRAM and 1MB Flash

Communication interface Bi-directional parallel (Centronics) and

serial (RS232)

Printer dimensions T308S/T312M/T312S:

283mm W x 495mm D x 394mm H (11.2" W x 19.5" D x 15.5" H)

T312Z\*:

278mm W x 475mm D x 338mm H (10.93" W x 18.69" D x 13.32" H)

Printer weight T308S/T312M/T312S: 25kg (55 lbs)

T312Z\*:15kg (32.4 lbs)

Shipping weight T308S/T312M/T312S: 29kg (63 lbs)

T312Z\*:22kg (49 lbs)

#### Media Specifications

Maximum print width 104mm (4.09")
Maximum media width 114mm (4.48")

Minimum media width T308S/T312M/T312S: 20mm (0.76")

T312Z\*: 25.4mm (1.0")

Maximum media roll diameter 203mm (8.0")

Media core diameter 76mm (3.0")

Ribbon wind Ink side out

#### Product order code

T308S-PRINTER T308S thermal printer - standard
T308S-C-PRINTER T308S thermal printer - cutter option
T308S-R-PRINTER T308S thermal printer - internal rewind

option

T308SN-PRINTER T308S thermal printer - network capabilities
T312SN T312S thermal printer - network capabilities

Description

T312S-PRINTER T312S thermal printer - standard
T312S-C-PRINTER T312S thermal printer - cutter option
T312S-R-PRINTER T312S thermal printer - internal rewind

option

T312M-PRINTER T312M thermal printer - standard
T312M-R-PRINTER T312M thermal printer - internal rewind

option

T312Z-PRINTER T312Z thermal printer - standard\*

\*Not available in Europe, Middle East or Africa

### T400 Series High performance and high speed thermal transfer printers

The T400 series printers are high performance thermal transfer printers with narrow to wide printheads suitable for variety of mission critical applications. The rugged and durable metal construction makes them a top choice for demanding industrial and commercial needs.

The enhanced memory and dual 32-bit processor provide extremely fast data processing and print speeds. T400 series printers are the best option for high volume and 24 hour duty cycles. High speed of 12 inch/sec on T408M printers is well suited for the applications in which labels are needed quickly, either on demand or in batches. With the highest print resolution of 600 dpi printhead on the T424S produces unmatched quality of crisp, high quality text, barcodes and graphic images in a limited space - ideal for printing linear and 2-dimensional barcodes.

The T408M is designed for use with Tyco Electronics TMS and HSI wire marker sleeves, as well as thermal transfer pressure sensitive label products. The T424S is ideal for use with Tyco Electronics thermal transfer printable pressure sensitive label products.



#### **Printer specifications**

T408M-TTDS-015 Tyco Electronics T424S-TTDS-116

Print head width T408M: 128mm (5.04")

T424S\*: 81mm (3.2")

Print head resolution T408M: 8dpmm (203 dpi)

T424S\*: 23.5dpmm (600 dpi) Print speed (maximum) T408M: 305mm/sec (12inch/sec)

T424S: 102mm/sec (4inch/sec)

Media sensor Transmissive and reflective

Reflective (fixed)

16MB SDRAM and 4MB Flash

Bi-directional parallel (Centronics), serial Communication interface

(RS232), and USB 2.0

T408M Printer dimensions

283.2mm W x 495.3mm D x 393.7mm H

(11.15" W x 19.5" D x 15.5" H)

T424S\*

263.5mm W x 495.3mm D x 393.7mm H

(10.37" W x 19.5" D x 15.5" H)

T408M: 25kg (55 lbs) Printer weight

T424S\*:22.7kg (50 lbs)

T408M: 29kg (63 lbs) Shipping weight T424S\*: 27kg (59 lbs)

#### Media Specifications

Minimum media width

Maximum print width T408M: 128mm (5.04")

T424S\*: 81mm (3.2")

Maximum media width T408M: 140mm (5.51")

> T424S\*: 114mm (4.5") T408M: 40mm (1.57")

T424S\*: 20mm (0.76")

203mm (8.0")

Maximum media roll diameter Media core diameter 76mm (3.0") Ribbon wind Ink side out

#### Product order code Description

T408M-PRINTER T408M thermal printer - standard T408M-R-PRINTER T408M thermal printer - internal rewind

option

T424S-PRINTER T424S thermal printer - standard\*

\*Not available in Europe, Middle East or Africa

T400 Series printers are available with wider printhead configurations for speciality identification applications. Contact Tyco Electronics for such product requirements.



### T612M-DS Double sided thermal transfer printer

Specifically designed by Tyco Electronics, the T612M-DS printer answers a common need in heat-shrinkable wire and cable identification markers: single-pass printing onto both the front and back side of the markers simultaneously. Specifically developed and modified by Tyco Electronics for this application, the T612M-DS is a high duty cycle, industrially robust thermal transfer printer. It will print onto the complete range of TMS System Six heat-shrinkable markers in all sizes from  $^3/32$ " (2.4 mm) to  $2^1/4$ " (57.2 mm). The data printed onto the two sides of each marker can be identical or different, same side up or flipped.



#### **Printer specifications**

 Tyco Electronics
 T612M-TTDS-098

 Print head width
 128 mm (5.04")

 Print head resolution
 12 dpmm (304 dpi)

 Print speed (maximum)
 50 to128 mm per second

(2 [recommended] to 5 inches per

second)

Media sensor Transmissive and gap

Memory 12MB DRAM and 1 MB flash
Communication interface Parallel (centronics) and serial

(RS232/422)

Printer dimensions 559 mm W x 432 mm D x 508 mm H

(22 "W x 17 "D x 20 "H)

Printer weight 38 kg (84 lbs)
Shipping weight 51 kg (112 ibs)

#### Media specifications

Maximum print width112mm (4.4 ")Maximum media width117 mm (4.625 ")Maximum media roll diameter254 mm (10.0 ")Media core diameter26 mm (3.0 ")Ribbon windInk side out

#### Product order code

T612M-DS-PRINTER

#### **Description**

Tyco Electronics T612M-DS thermal

printer - standard

### AM6310 Heavy duty dot matrix printer

Specifically designed by Tyco Electronics, the AM6310 is a heavy duty industrial dot matrix printer with a high impact 24-pin print head. Automatic media thickness detection and a high impact print head make the AM6310 the best industrial printer available for heavy gauge wire marker and tag materials, and the 24-pin print head produces high quality text printing with fast print speeds. Standard AM6310 printer models are designed to print on Tyco Electronics HSI wire marker sleeves and dot matrix pressure sensitive label and tag products. AM6310D models are equipped with dual tractor mechanism necessary for guiding TMS sleeve product range. Such dual tractor models can also print on HSI and dot matrix label and tag product range.



#### **Printer specifications**

Print direction

Tyco Electronics TTDS-002

Print head 24-pin high-impact dot matrix

Print speed Max. high-speed draft: 600 cps at 12 cpi

> Letter quality: 160 cps at 12 cpi Bi-directional, logic seeking

LCD, 12 keys, select-dial and Control panel

quick access setup menu

Feed mechanism Tractor (single or dual)

2 MB flash Memory Input buffer

Communication interface Parallel port (centronics 36-pin) and

serial port (RS232/DB25)

483 mm W x 427 mm D x 208 mm H Printer dimensions

19.0"W x 16.0"D x 8.2"H

Printer weight 18.1 kg (40 lbs)

#### Media specifications

279 mm (11.0") Maximum print width Maximum media width 305 mm (12.0") Minimum media width 25 mm (1.0")

#### Product order code

AM6310-110V

Tyco Electronics AM6310 dot matrix

printer - standard 110 V

**Description** 

AM6310-230V Tyco Electronics AM6310 dot matrix

printer - standard 230 V

AM6310D-110V Tyco Electronics AM6310 dot matrix

printer - dual tractor 110 V

AM6310D-230V Tyco Electronics AM6310 dot matrix

printer - dual tractor 230 V

## New at Tyco Electronics. Ultra clean dot martrix labels!

#### Process Improvement - Web Cleaning

To address reported issues with our dot matrix label stock, we sought out equipment that would help us to remove containments from the label surface and improve overall printability. This contact cleaning/tacky roll system was integrated into our rewind tables to remove small to microscopic particles down to 1 micron from the label surface. Flood coating the web with black ink showed a cleaning efficiency that was beyond our expectations.

This 12" roller vacuum style construction helps to reduce waste, imrpove product quality and save production loss. Containments tend to attach themselves to the labels surface due to static electricity and moisture which require stringent cleaning techniques. Since implementing the web cleaners, we have seen huge improvements in the cleanliness of our label stock which has drastically reduced the potential for printing issues.



### LMS6000 Laser Marking System

The LMS6000 Laser Marking System is a fully functional, closedloop, Ytterbium doped fiber laser system that is fact, efficient, flexible and reliable. The LMS6000 system comes integrated with state-of-the-art software and transport systems. These integrated systems are capable of marking on a variety of flat label materials.

Optional direct marking module provides the capability to mark on specific metallic and plastic components.

The system comes complete with a fume extraction system to meet the strictest of emission and safety regulations. If validation is not required, the system can be fitted with an optional cutter used to cut the labels as they exit the marking chamber.



#### Printer specifications

Operating power 85-220V, 50-80Hz - laser 110V, 60 Hz - fume extractor

10 watts laser power, 0.5mJ Maximum output power 350W Laser only Power consumption

10-40°C Operating temperature 30-85% Humidity non-condensing Weight: 42KG

Ytterbium doped fiber laser, pulsed Laser type

> Q-switched Air cooled

Cooling system Beam dimensions TEM-00 (M2<1.4), Plano Spherical 163

Wavelength 1062nm Pulse width 100nsec 20-80MHz Pulse frequency Pilot laser 650nm/1mW

Laser protection class

130mm x 130mm Marking area Resolution 725-1000 dpi

Galvo Mirrors, Safety shutter included Beam attenuator Integrated fume extractor with Rheostat Exhaust control, filter layers and exhaust indicators

#### Software specifications

Operating system Wndows 2000 and XP, Pentium IV, 500-Mhz,

150 MB hard drive, USB Interface

All standard dimensional, PLT, DXF, BMP, Graphics

JPG,PCX, WMF, EPS, TIFF. all elements can be

scaled, moved, grouped or mirrored

Barcodes 1D - Code 39, Code 93, Code 128, Data

Matrix - ECC200, QRCode

Characters All true type fonts under Windows, filled, out

lined, laser specific double or triple line fonts. All fonts can be scaled or wobbled stretching,

compressing, circular arc

Integration capabilities Industry standard ERP/MRP systems,

databases and programs

#### Product order code

LMS6000-130 Tyco Electronics LMS6000 laser - standard

LMS6000-XYZ30 Direct part marking module

300mm x 300mm

**Description** 

LMS6000-XYZ80 Direct part marking module

800mm x 800mm

LMS6000-XYZ100 Direct part marking module

1000mm x 1000mm - fume extractor unit

LMS6000-FE-110V Integrated fume extractor system

Verifier/Validator

Part No. LMS6000-VRF-100, integrated data

matrix verifier/validator



### LMS-9000 Laser Marking System

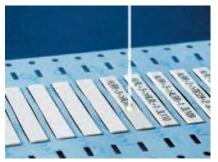
The LMS-9000 laser marker is a low maintenance laser marking system designed for high volume users. It is a highly automated system including cutting to length, postmark rewinding and double sided, one step sleeve marking.

Integrated with WinTotal marker sleeve/label marking software, it is designed for Tyco Electronics wire identification sleeves and selected labels.

#### Features and benefits

- Simultaneous double-sided laser marking option for marker sleeves saves considerable time and eliminates any margin for error
- Optional handling system designed to handle several Tyco Electronics products
- Laser marking and cutting for kitting in one integrated step eliminates post print cutting and kitting
- Virtually no product wastage during marking, thanks to a state of the art product recognition and jogging system
- Optional scoring and marking feature for label products
- Modular design for easy placement and re-installation
- Fully integrated software and hardware
- On screen diagnostics
- Meets all relevant US and European laser equipment standards
- Laser parameters pre-set and software controlled





### Product order code

Tyco Electronics

LMS-9000

TTDS-057

**Description** 

Tyco Electronics LMS-9000 laser - standard

\*Please contact your local Tyco Electronics representative for product configuration per your application.

See page 168 for Laser Markable Label Materials and ordering information.

Tyco Electronics also offers a pre-printing service to customers who need high quality, durable, permanent laser markers, yet do not want to invest in the purchase of LMS-9000 equipment at this time. All pre-printed laser markers, labels or tags are produced to out exacting quality, manufacturing standards and meet applicable mark permanence specifications. A variety of System Six and HSI products including TMS-SCE, D-SCE, HT-SCE, HL and HLX are available for pre-print base materials along with many label materials.

Please contact your local Tyco Electronics representative to find out more about our laser pre-print services.



### Accessories

### **BSC-100 Barcode scanners**

Tyco Electronics BSC-100 barcode scanners are cost effective, full featured, and fast barcode readers. These combine high image transfer speed with exceptional image quality. Their omnidirectional reading capability allows fast and easy reading of EAN-UCC composite codes, 2-dimensional (PDF417, datamatrix) and Postal codes. It comes with USB connection ready to "point and shoot" at a complicated looking 2-dimensional barcode or a simple linear code. It can be used in a wide range of commercial and industrial applications within government/postal, military, healthcare, logistics, manufacturing and retail sectors.



#### **General specifications**

Symbologies

2 Dimensional:

PDF417, MicroPDF417, MaxiCode, DataMatrix, QR Code, Aztec, Aztec Mesas, Code 49 and EAN-UCC composite

Linear:

Codabar, Code 39, Interleaved 2 of 5, Code 93, Code 128, UPC, EAN, RSS, and

Codablock Postal:

Postnet, Planet Code, British Post, Canadian Post, Japanese Post, KIX

OCR fonts: OCR-A, OCR-B

Power Requirements
Physical Dimensions

4.5 - 12 VDC - powered through USB port  $81\text{mm}\,\text{W}\,\text{x}\,135\text{mm}\,\text{L}\,\text{x}\,157\text{mm}\,\text{H}$ 

(3.2" W x 5.3" L x 6.2" H)

Weight 184.3g (6.5 oz)

### Product order code

BSC-100

#### Description

Barcode scanner - standard



### **BSC-200 Hand held imager**

The BSC-200 imager is a portable hand held solution for reading both linear bar codes and 2D symbols. The BSC-200 reads a wide range of bar code symbols created from a variety of printing and marking methods.

#### • Read Area:

The BSC-200 imager's advanced "dual decode zone" technology allows the user to easily capture 2D symbols and linear bar codes at varying distances from 2" to 20" (50.8mm to 508mm). This wide read area allows the symbols to be decoded fast and reliably.

Fast processing speeds also add to the BSC-200's ability to acquire and decode multiple symbologies, with no adjustment of the imager required.

#### · Ease of use:

BSC-200 imagers feature point-and-click targeting with a red laser spot to quickly center the symbol in the field of view. Beeper, vibrator and multi-purpose LEDs provide real-time feedback to signal successful decoding.

#### Applications:

The BSC-200 imager is a strong reading solution for applications needing to read linear bar codes and 2D symbologies with a portable handheld device.

#### System Integration:

BSC-200 imagers are available in 2 configuration options:

- Batch: A wireless way to collect thousands of decoded symbols for later download, capable of performing more than 4000 reads from a single battery charge and buffers a minimum of 1 MB of data in nonvolatile memory. (battery purchased separately)
- Cabled: Cabled units include USB, RS-232. (RS-232 available through the purchase of optional connector kit contact Tyco Electronics)

### Symbologies:

The BSC-200 automatically discriminates between all major 2D matrix and linear bar code symbologies, and offers time stamp capabilities for logging data. Symbologies include:

#### 2D Symbologies:

- MaxiCode - QR Code

- Aztec Code - Data Matrix (ECC 200)

#### Stacked Symbologies:

- UCC Composite
- PDF417 (with Macro support)
- Micro PDF417

#### Linear Bar Codes:

- Codablar - Codablock F - GoCode - Code 93 - RSS - Code 39

- Code 128 - Standard postal codes

- UPC/EAN/JAN - Int 2 or 5

### • BSC-200 Accessories:

- Long-life 1300 mA lithium-ion battery
- Two-bay battery charger
- RS-232 kit

#### Imager specifications

 $Imager \ dimensions \\ 33mm\ H\ x\ 46mm\ W\ x\ 109mm\ D$ 

(1.3" H x 1.8" W x 4.3" D)

 Imager weight:
 71.5 g (2.5 oz) not including cable

 Handle dimensions
 96.5 mm H x 30 mm W x 36 mm D

(1.8" H x 1.2" W x 1.4"D)

Handle weight: 59.8 g (1.2 oz) not including cable

#### Environmental

Operating temperature 0°C to 40°C (32°F to 104°F)

Storage temperature -20°C to 60°C (-4°F to 140°F)

Humidity 5% to 90% (non-condensing)

#### **Electrical**

 Power requirements
 5 VDC (mA)

 Typical:
 310

 Peak:
 310

 Sleep
 3

#### Read Parameters

Pitch ±60°C (front to back)

Skew  $\pm 60^{\circ}$  Tilt  $360^{\circ}$ 

Focal Range 50.8mm to 508mm (2" to 20")

Rotational Tolerance ±180

Print Control Resolution 25% (bar codes), 35% (PDF417),

absolute dark/light reflectance differential

measure at 650 nm

Target Beam Visible laser

Ambient Light Immunity

Shock

Visible laser diode at 630 nm, Class 2 Sunlight, up to 9,000' candles 96,890 lux Withstands multiple drops of 2m (6.5')

to concrete

#### **Product Order Code**

BSC-200 Hand held imager



Catalog 1654227 Revised 04-07 Scanners and Imagers



### VLD-100 Hand held imager/validator

The VLD-100 Imager/Validator is optimized to read both linear bar codes and 2D symbols. It is an aggressive hand held imager/validator for decoding symbols on low contrast substrates such as metal, plastic, rubber, polyester, vinyl, Kapton, polyvinyl fluoride and glass. The VLD-100 can read marking methods such as dot peen, thermal transfer and laser/chemical etch. Containing custom optics and Tyco Electronics' decode algorithms, the VLD-100 combines the decoding power of Tyco Electronics'popular smart camera, VRF-100, into a portable hand held device.

Accessories

#### Optical Options:

The VLD-100 hand held imager/validator is available in:

- The high resolution version is custom designed to optimize resolution for reading small 2D symbols.

#### LightRay Optics Accessory:

Tyco Electronic's LightRay Optics solution further enhances its ability to read directly marked parts. By directing the illumination toward the symbol at off-axis angles, the LightRay Optics increase symbol contrast and filters out texture noise. The LightRay Optics are designed so that it is positioned at the correct focal distance and angle. No training is needed to find the best angles for reading low contrast symbols. Either optical accessory easily attaches on to the end of the VLD-100. Two options are available: the LightRay Optics 100 Series and the LightRay Optics 200 Series.



LightRay Optics 100 Series generates off-axis diffuse illumination



LightRay Optics 200 Series generates dark field illumination

#### Ease of Use:

The VLD-100 features point-and-click targeting with a red laser spot to quickly center the symbol in the field of view. Beeper, vibrator and multi-purpose LEDs provide real-time feedback to signal successful decoding.

### Applications:

The VLD-100 provides outstanding performance validating challenging 2D codes.

Automotive and Aerospace: reads codes marked on steel, iron, aluminum, rubber, and glass parts by laser etch, dot peen, metal stamp, and thermal transfer products.

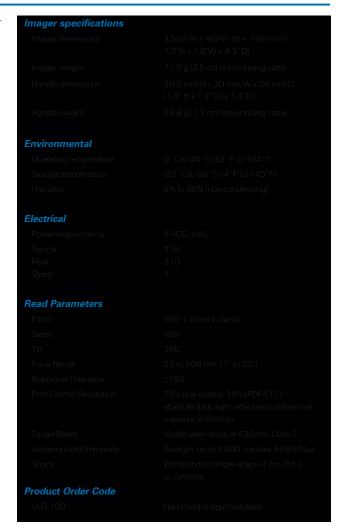
Electronics: reads codes laser etched on printed circuit boards and components.

Department of Defense: reads UID codes on a variety of substrates. Software enables it to validate UII code format for suppliers and constructs the UID string for DoD operators

#### System Integration:

All Tyco Electronics imagers are available in 2 configuration options:

- Batch: A wireless way to collect thousands of decoded symbols for later download, capable of performing more than 4000 reads from a single battery charge and buffer a minimum of 1 MB of data in non-volatile memory.
  - Cabled: Cabled units include USB, RS-232. (RS-232 available through the purchase of optional connector kit - contact Tyco Electronics)





### · Symbologies:

The VLD-100 imager/validator reads all standard linear bar codes plus:

#### 2D Symbologies:

- Data Matrix (ECC 0200) QR Code
- MaxiCode - Aztec Code

Stacked Symbologies:

- UCC Composite - PDF417 (Macro Support)
- Micro PDF417

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### VRF-100 Production ready data matrix verifier

The VRF-100 is an ISO/IEC 15415 and AS9132-compliant Data Matrix verifier for use in production environments. The VRF-100 helps to ensure that your marks will be verified accurately every time. Unlike most verifiers that are mounted on stands designed for the lab environment, the VRF-100 Verifier is a fully-contained, compact device that is easy to integrate into the production environment. The VRF-100 Verifier is factory-calibrated to specific traceability standards with a fully-contained housing, making it easy to integrate into existing applications. No on-site calibration of optics or lighting is needed to verify marks with the Verifier. Simply present the part to the Verifier, trigger, and receive the symbol quality report.

#### Production-Ready

It is the first 2D verifier designed specifically for use in a production environment. Its compact, lightweight design makes the Verifier easy to integrate into production processes. A self-contained, factory-calibrated system with flexible mounting allows the Verifier to be adapted to any application quickly and easily.

#### Calibrated System

It provides the user with a ready-to-use, ISO/IEC 15426-2 calibrated system. Simply present the part, trigger, and the Verifier will output the results. The user is not required to focus the optics, set the light angles. Fixed optics and pre-set illumination angles make the verifier consistent, reliable and accurate.

#### • Illumination Chamber

The Verifier's fully-enclosed illumination chamber provides the controlled lighting environment for accurate, repeatable verification. The chamber is specifically engineered to produce the illumination angles required by the ISO/IEC 15415 standard.

### VRF Software

Offers complete symbol verification reports in a variety of formats: PDF, CSV, HTML and RTF.

#### ISO/ICE 15426-2 Certified

The Verifier is ISO/IEC 15426-2 certified. It is precisely engineered to meet rigorous verification standards, ensuring accurate and consistent verification.

correction

#### • ISO/IEC 15415 Compliant

- Print growth (ungraded)

The Verifier provides verification of 2D symbols for parameters:

- Symbol contrast
- Modulation
- Axial non-uniformity
- Grid non-uniformity
- Unused error

#### • AS9132

Verifies Data Matrix symbols in accordance with the parameters called out in the AS9132 standard:

- Quiet Zone
 - Cell fill
 - Dot ovality
 - Contrast
 - Dot center offset
 - Angle of distortion
 - Symbol type

### • MIL-STD 130

Requires verification of Data Matrix symbols to both ISO/IEC 15415 and AS9132 standards as required by the MIL STD 130 specification.

#### Imager specifications

Imager dimensions

#### **Environmental**

Operating Temperature
Storage Temperature
Humidity

#### Electrical

Power Requirements

307 mm H x 127 mm W x 122 mm D (12.1" H x 5.0" W x 4.8" D)

0°C to 40°C (32°F to 104°F) -50°C to 75°C (-58°F to 167°F) Up to 90% (non-condensing)

Input, 10 to 28 VDC, 200 mV-P-P max. ripple, 270 mA at 24 VDC (typ. CMOS), 333 mA at 24 VDC (typ. CCD)
Trigger, New Master, Input 1: (Optoisolated) 5 to 28 VDC rated (12 mA at 24 VDC)
Outputs 1/2/3: (Optoisolated) 1 to 28

VDC rated, (I  $_{CE}$  < 100 mA at 24 VDC, current limited by user)

#### **Product Order Code**

VRF-100\*

Data matrix verifier

\*not available in Europe, Middle East, or Africa



Dimensions <u>not</u> italicized are in millimeters while dimensions in inches are italicized

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-5-729-0425 South America: 55-11-3611-1514 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-141-810-8967 Scanners and Imagers



### Thermal transfer ribbons



### **RJS-4RPSCE**

Tyco Electronics RJS-4RPSCE is a high durability black resin thermal transfer ribbon tested and approved for use on Tyco Electronics TMS-SCE, RPS and HL cable markers wire marker sleeve products. For reliable print performance and durabilitv use with Tvco Electronics recommended compatible printers.

#### **General specifications**

Ribbon width 110 mm (4.33 inches) Ribbon length 300 meters (984 feet)

Ink Standard color Black Ribbon wind direction Ink side out

Compatible printers T308S, T312M, T312Z\*\*, T408M, T612M-DS, T312S

TMS-SCE, RPS, SB, HL, HS, HC Compatible materials

\*\*Not available in Europe, Middle East or Africa

#### **Ordering information**

TMS-RJS-RIBBON-4RPSCE Product order code

Description Tyco Electronics 4RPSCE thermal transfer ribbon for T308S, T312S, T312M, T312Z\*\*,

T408M and T612M-DS printers

\*\*Not available in Europe, Middle East or Africa

### 101-4RPSCE

Tyco Electronics 101-4RPSCE is a high durability black resin thermal transfer ribbon tested and approved for use on Tyco Electronics TMS-SCE, RPS wire marker sleeve products and SB self-laminating labels. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

### **General specifications**

Ribbon width 110 mm (4.33 inches) Ribbon length 74 meters (242 feet)

Resin Ink Standard color Black Ribbon wind direction Ink side out Compatible printers T208M, T212M TMS-SCE, RPS, SB Compatible materials

### **Ordering information**

Product order code TMS-101-RIBBON-4RPSCE

Description Tyco Electronics 4RPSCE thermal transfer ribbon for T208M and T212M printers

#### **RJS-4HT**

Tyco Electronics RJS-4HT is a high temperature black resin thermal transfer ribbon tested and approved for use on Tyco Electronics HT-SCE high temperature wire marker sleeve products. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### **General specifications**

Ribbon width 110 mm (4.33 inches) Ribbon length 300 meters (984 feet)

Ink Resin Standard color Black Ribbon wind direction Ink side out

Compatible printers T312M, T408M, T612M-DS Compatible materials HT-SCE, HTCM-SCE-TP (T312M only)

#### **Ordering information**

TMS-RJS-RIBBON-4HT Product order code

Description Tyco Electronics 4HT thermal transfer ribbon for T312M, T408M and T612M-DS printers

Catalog 1654227

### Thermal transfer ribbons

#### 101-4HT

Tyco Electronics 101-4HT is a high temperature black resin thermal transfer ribbon tested and approved for use on Tyco Electronics HT-SCE high temperature wire marker sleeve products. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### General specifications

Ribbon width 110 mm (4.33 inches)
Ribbon length 74 meters (242 feet)

 Ink
 Resin

 Standard color
 Black

 Ribbon wind direction
 Ink side out

 Compatible printers
 T208M, T212M

 Compatible materials
 HT-SCE

#### Ordering information

Description

Product order code TMS-101-RIBBON-4HT

Tyco Electronics 4HT thermal transfer ribbon for T208M and T212M printers

#### 1910

Tyco Electronics 1910 is a high durability high contrast resin/wax thermal transfer ribbon tested and approved for use on the HLX-zero halogen cable marker tape and the HXTM-FB rail tags. For reliable print performance use with Tyco Electronics recommended printers.

#### **General specifications**

Ribbon width 110 mm (4.33 inches) 210 meters (689 feet) Ribbon length Resin/wax Ink Standard color Black Ribbon wind direction Ink side out Compatible printers T408M HLX, HXTM-FB Compatible materials Tyco Electronics TTDS-080

#### **Ordering information**

Product order code 1910-RIBBON-4T300

Description Tyco Electronics 1910 thermal transfer ribbon for T408M printers

### 1966 - **RIBBON**

Tyco Electronics
1966-RIBBON is an ultra-high
durability black resin thermal
transfer ribbon tested and
approved for use on Tyco
Electronics HX, HX-SCE and
D-SCE wire marker sleeves as
well as CM-SCE-TP and HLX
cable markers. See right for
compatible materials. For
reliable print performance and
durability use with Tyco
Electronics recommended
compatible printers.

### **General specifications**

Tyco Electronics TTDS-099
Ribbon width 100 mm (3.9 inches)
Ribbon length 300 meters (984 feet)
Ink Resin

Standard color Black
Ribbon wind direction Ink side out
Compatible printer T312M

Compatible materials CM-SCE-TP, D-SCE, HLX, HS, HX, HXTM-FB, HX-SCE, HL

#### **Ordering information**

Product order code 1966-RIBBON

Description Tyco Electronics 1966 thermal transfer ribbon for T312M

#### T200-RIBBON-1966

Tyco Electronics T200-RIBBON-1966 is an ultra-high durability black resin thermal transfer ribbon tested and approved for use on Tyco Electronics HX-SCE wire marker sleeves. See right for compatible materials. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

### **General specifications**

Ribbon width 100 mm (3.9 inches)
Ribbon length 74 meters (242 feet)

 Ink
 Resin

 Standard color
 Black

 Ribbon wind direction
 Ink side out

 Compatible printers
 T212M

Compatible materials HX-SCE, D-SCE, HLX-NEL

#### **Ordering information**

Product order code T200-RIBBON-1966

Description Tyco Electronics 1966 thermal transfer ribbon for T212M



### Thermal transfer ribbons

#### 1330-0606

Tyco Electronics 1330-0606 is a high durability black resin thermal transfer ribbon tested and approved for use on Tyco Electronics thermal transfer printable pressure sensitive labels. See right for compatible materials. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### **General specifications**

Ribbon width\* 110 mm (4.33 inches)
Ribbon length 300 meters (984 feet)
Ink Wax/Resin

Standard color Black
Ribbon wind direction Ink side out

Compatible printers T308S, T312M, T312S, T312Z\*\*, T408M

Compatible materials SB, NC, WP, HW, MP, HM, MV

\* Available in additional sizes by custom quotation \*\*Not available in Europe, Middle East or Africa

#### Ordering information

Product order code 1330-0606-10

Description Tyco Electronics RHQ thermal transfer ribbon for all T300 and T400 printers

#### 1330-0607

Tyco Electronics 1330-0607 is a high durability black resin thermal transfer ribbon tested and approved for use on Tyco Electronics thermal transfer printable pressure sensitive labels. See right for compatible materials. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### General specifications

Ribbon width\* 110 mm (4.33 inches)
Ribbon length 300 meters (984 feet)

Ink Resin
Standard color Black
Ribbon wind direction Ink side out

Compatible printers T308S, T312M, T312S, T312Z\*\*, T408M

Compatible materials CP, HM, HMM, HPK, HW, MP, MV, NC, PVF, TN, TTP, WP, WV, TP, HLTM, SP

\* Available in additional sizes by custom quotation \*\*Not available in Europe, Middle East or Africa

#### Ordering information

Product order code 1330-0607-10

Description Tyco Electronics RHD thermal transfer ribbon for all T300 and T400 printers

#### 1330-0607-T200

Tyco Electronics 1330-0607-T200 is a high durability black resin thermal transfer ribbon tested and approved for use on Tyco Electronics thermal transfer printable pressure sensitive labels. See right for compatible materials. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

### General specifications

Ribbon width 110 mm (4.33 inches)
Ribbon length 74 meters (242 feet)

 Ink
 Resin

 Standard color
 Black

 Ribbon wind direction
 Ink side out

 Compatible printers
 T208M,T212M

Compatible materials HM, HMM, HW, MP, MV, NC, TN, TTP, WP, WV, HPK

#### Ordering information

Product order code 1330-0607-T200

Description Tyco Electronics RHD thermal transfer ribbon for T208M and T212M printers

#### 1330-0619

Tyco Electronics 1330-0619 is a high temperature black resin thermal transfer ribbon tested and approved for use on Tyco Electronics thermal transfer printable Kapton® labels. See right for compatible materials. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### General specifications

Ribbon width\* 110 mm (4.33 inches)
Ribbon length 300 meters (984 feet)

Ink Resin
Standard color Black
Ribbon wind direction Ink side out

Compatible printers T308S, T312M, T312S, T312Z\*\*, T408M

Compatible materials T1K, T2K, TSK, T2Y, KTT

\* Available in additional sizes by custom quotation \*\*Not available in Europe, Middle East or Africa

#### Ordering information

Product order code 1330-0619-10

Description Tyco Electronics RHT thermal transfer ribbon for all T300 and T400 printers

Catalog 1654227 Revised 04-07

### Thermal transfer ribbons

#### 1330-0600

Tyco Electronics 1330-0600 is a high quality black wax thermal transfer ribbon tested and approved for use on Tyco Electronics thermal transfer printable paper labels. See right for compatible material. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### General specifications

Ribbon width\* 110 mm (4.33 inches) Ribbon length 300 meters (984 feet)

Ink Wax Standard color Black Ribbon wind direction Ink side out

Compatible printers T308S, T312M, T312S, T312Z\*\*, T408M

Compatible materials FP

\* Available in additional sizes by custom quotation \*\*Not available in Europe, Middle East or Africa

#### Ordering information

Product order code 1330-0600-10

Description Tyco Electronics RS thermal transfer ribbon for all T300 and T400 printers

#### 1330-0600-T200

Tyco Electronics 1330-0600-T200 is a high quality black wax thermal transfer ribbon tested and approved for use on Tyco Electronics thermal transfer printable paper labels. See right for compatible material. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### General specifications

Ribbon width 110 mm (4.33 inches) Ribbon length 74 meters (242 feet)

Ink Wax Standard color Black Ribbon wind direction Ink side out Compatible printers T208M, T212M Compatible materials FP

#### Ordering information

Product order code 1330-0600-T200

Tyco Electronics RS thermal transfer ribbon for T200 printers Description

#### 3300

Tyco Electronics 3300 is a high durability black resin thermal transfer ribbon tested and approved for use on Tyco Electronics thermal transfer printable pressure sensitive labels. See right for compatible materials. For reliable print performance and durability use with Tyco Electronics recommended compatible printers.

#### **General specifications**

110 mm (4.33 inches) Ribbon width Ribbon length 300 meters (984 feet)

Standard color Black Ribbon wind direction Ink side out

Compatible printers T308S, T312S, T312M, T312Z, T408M

PVF, TTVF Compatible materials \* Available in additional sizes by custom quotation

#### **Ordering information**

Product order code 1330-3300-10

Tyco Electronics 3300 thermal transfer ribbon for all T300 and T408M printers Description

#### T300-WH

White resin based ribbons are available to print on Tyco Electronics TMS-SCE wire marker sleeve products. For print performance and durability use with Tyco Electronics Electronics recommended compatible printers.

#### **General specifications**

110 mm (4.33 inches) Ribbon width Ribbon length 300 meters (984 feet)

Resin Standard color White Ribbon wind direction Ink side out

T308S, T312S, T312Z\*\*, T312M and T-408M Compatible printers

Compatible materials TMS-SCE (T312M only), CP, TTP

\*\*Not available in Europe, Middle East or Africa

#### **Ordering information**

Product order code T300-RIBBON-WH

Tyco Electronics thermal transfer ribbon for T300 and T400 printers Description



### Thermal transfer ribbons

#### T200-WH

White resin based ribbons are available to print on Tyco Electronics TMS-SCE wire marker sleeve products. For print performance and durability use with Tyco Electronics recommended compatible printers.

#### **General specifications**

Ribbon width 110 mm (4.33 inches)
Ribbon length 70 meters (230 feet)

 Ink
 Resin

 Standard color
 White

 Ribbon wind direction
 Ink side out

 Compatible printers
 T208M,T212M

Compatible materials TMS-SCE (T212M only) HM, MP, MV, TTP

#### Ordering information

Product order code T200-RIBBON-WH

Description Tyco Electronics thermal transfer white ribbon for T200 printers

#### T300-WH-4HT

White resin based ribbons are available to print on Tyco Electronics HT-SCE wire marker sleeve products. For print performance and durability use with Tyco Electronics recommended compatible printers.

#### **General specifications**

Ribbon width 114 mm (4.49 inches) Ribbon length 300 meters (984 feet)

 Ink
 Resin

 Standard color
 White

 Ribbon wind direction
 Ink side out

 Compatible printers
 T312M

 Compatible materials
 HT-SCE

#### Ordering information

Product order code T300-RIBBON-WH-4HT

Description Tyco Electronics thermal transfer white ribbon for all T308M. T3 12M and T408M printers

### T200-WH-4HT

White resin based ribbons are available to print on Tyco Electronics HT-SCE wire marker sleeve products. For print performance and durability use with Tyco Electronics recommended compatible printers.

### General specifications

Ribbon width 110 mm (4.33 inches)
Ribbon length 74 meters (242 feet)
Ink Resin

Standard color White
Ribbon wind direction Ink side out
Compatible printers T212M
Compatible materials HT-SCE

#### Ordering information

Product order code T200-RIBBON-WH-4HT

Description Tyco Electronics thermal transfer white ribbon for T200 printers

#### **RHCA**

RHCA resin based ribbons are specifically designed to print on polyester or metalized polyester Tyco Electronics label products. For print performance and durability use with Tyco Electronics recommended compatible printers. It is not suitable to print on paper or self-laminating products.

#### **General specifications**

Ribbon width 110 mm (4.33 inches)
Ribbon length 91 meters (300 feet)

Ink Resin

Standard color Red, Blue and Green (see ordering information below)

Ribbon wind direction Ink side out

Compatible printers T308S, T312M, T312S, T312Z\*\* and T408M
Compatible materials CP, HW, HM, HPK, HMM, MP, MV, PVF, WP, WV

\*\*Not available in Europe, Middle East or Africa

#### Ordering information

Product order codes 1330-0620-10 (Red) 1330-0621-10 (Blue) 1330-0622-10 (Green)

Description Tyco Electronics thermal transfer color ribbon for all T300 and T400 printers

Catalog 1654227 Revised 04-07 South America: 55-11-3611-1514 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-141-810-8967

### Thermal transfer ribbons

#### **RHCB**

RHCB wax-resin based ribbons are specifically designed to print on paper. For print performance and durability use with Tyco Electronics recommended compatible printers.

### **General specifications**

Ribbon width 110 mm (4.33 inches) Ribbon length 300 meters (9840 feet)

Ink Wax-Resin

Red, Blue and Green (see ordering information below) Standard color

Ribbon wind direction Ink side out

Compatible printers T308S, T312M, T312S, T312Z\*\* and T408M

Compatible materials ΕP

\* \*Not available in Europe, Middle East or Africa

### Ordering information

Product order codes 1330-0630-10 (Red) 1330-0631-10 (Blue) 1330-0632-10 (Green) Description Tyco Electronics thermal transfer color ribbon for all T300 and T400 printers



### **Dot matrix ribbons**



#### **RIBBON A**

Tyco Electronics RIBBON A is a permanent black ink dot matrix ribbon tested and approved for use on Tyco Electronics TMS-SCE wire marker sleeves and RMK-6 products on the LQ870 printer. See right for compatible materials.

### **General specifications**

Standard Standard color Black LQ870 Compatible printer

Compatible materials CM-SCE, D-SCE, RMK-6, RPS, TMS-SCE

#### **Ordering information**

Product order code TMS-SYSTEM-SIX-RIBBON-A

Tyco Electronics dot matrix Ribbon A for LQ870 printer Description

### **QUICK-DRY LQ870**

Tyco Electronics QUICK-DRY LQ870 is a quick drying indelible black ink dot matrix ribbon tested and approved for use on Tyco Electronics dot matrix printable pressure sensitive labels on the LQ870 printer. See right for compatible materials.

### **General specifications**

RI Quick-Dry Ink Standard color Black Compatible printer LQ870

Compatible materials C, DMVF, E, HLTM, K, M, NMX, PV, TW

#### **Ordering information**

Product order code 1330-0037-00

Description Tyco Electronics Quick-Dry dot matrix ribbon for LQ870 printer

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### **Dot matrix ribbons**

#### STANDARD AM6310

Tyco Electronics STANDARD AM6310 is a permanent black ink dot matrix ribbon tested and approved for use on Tyco Electronics wire marker sleeves and cable marker products on the AM6310 printer. See right for compatible materials.

#### General specifications

Ink Standard Standard color Black

Compatible printer AM6310, AM6310D

Compatible materials CM-SCE, D-SCE\*, HC, HL, HLTM-FB, HM, HS, RMK-6, RPS\*, TMS-SCE\*, MultiMark

#### **Ordering information**

Product order code 1892BKO4-RIBBON

Description Tyco Electronics standard dot matrix ribbon for AM6310 printer

\* Available only with AM6310D models

#### **HIGH-PERF AM6310**

Tyco Electronics HIGH-PERF AM6310 is a high performance, permanent black ink dot matrix ribbon tested and approved for use on Tyco Electronics wire marker sleeves and cable marker products on the AM6310 printer. See right for compatible materials.

#### **General specifications**

nk High performance

Standard color Black

Compatible printer AM6310, AM6310D

Compatible materials HM, HX

#### Ordering information

Product order code 1892BK03-HIGH-PERF-RIBBON

Description Tyco Electronics high performance dot matrix ribbon for AM6310 printer

#### **QUICK-DRY AM6310**

Tyco Electronics QUICK-DRY AM6310 is a quick drying indelible black ink dot matrix ribbon tested and approved for use on Tyco Electronics dot matrix printable pressure sensitive labels on the AM6310 printer. See right for compatible materials.

#### General specifications

Ink RI Quick-Dry
Standard color Black

Compatible printer AM6310, AM6310D

Compatible materials C, DMVF, E, HLTM, HPC, HPTM, K, M, NMX, PV, TW

### Ordering information

Product order code 1892BK01

Description Tyco Electronics Quick-Dry dot matrix ribbon for AM6310 printer



### Software

### WinTotal Wire marker and label printing software

WinTotal software is a powerful 32-bit label/marker design package that makes wire marker printing simple in an industrial environment. Running in the familiar Windows environment, the package is pre-loaded with all the Tyco Electronics wire identification products to facilitate marker design. The software features a highly graphical user interface to simplify operator training and minimize errors. The Windows environment gives access to a huge array of font options, including non-English fonts such as Chinese, Japanese and Hebrew (when used with appropriate operating systems or add-on software), and also allows simple importing and manipulation of graphics and logos. Bar code printing is available.

WinTotal software supports all common wire identification needs, including:

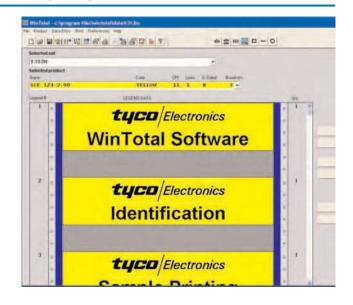
- Manual printing
- Automatic set printing from spreadsheets, databases or other CAD systems (including Tyco Electronics's HarnWare® harness design software package)
- Incremental alpha and numeric fields
- Double-sided marker printing
- Automatic or manual routing or multiple printers
- Paper output option
- Wraparound marker production
- User-defined products
- Programmable buttons for repeated data insertion

The software can be password protected at different levels to prevent unauthorized use, and can be run on networked computers so that the design function can be separated from printing. The display can be set to several different languages, and a full on-screen Help function is incorporated.

Running behind the simple WinTotal user interface is a powerful label-making package, so the software can be used to design and print general labeling applications such as rating plates and shipping labels.

### Features and benefits

- Powerful wire marker design and print software
- Familiar Windows user environment
- Pre-loaded with Tyco Electronics identification products
- Powerful import and export functions: reads wire lists from spreadsheets, databases and text files from CAD systems
- Printer multi-tasking
- Multiple on-screen languages



**Specifications** 

TTDS-001

### WinTotal Wire marker and label printing software

### Features and benefits (continued)

### Support

- Free technical support
- OS Support: Windows 95, 98, ME, NT, 2000, XP
- International language support

#### Label design

- WYSIWYG label design and display
- Align text left, right, justified or center
- Built-in printer font support
- Windows True Type fonts
- Lines, boxes and graphic images
- Resize, rotate and stretch text, graphics and bar codes
- Thumbnail preview of saved labels

### **Printing**

- Set and batch printing capabilities
- Multiple application port printing (MAPP)

- Double sided marker printing
- Local or network printer support
- Number of identical or serialized copies selectable from database

#### **Serialization**

- Increment or decrement by any interval
- Numeric, alphanumeric and custom base serialization

### **Database options**

- Microsoft ODBC support, including: Access, Excel and dBase
- ASCII text files
- AutoCAD importing

#### **Data management**

- Visual Basic scripting for custom data processing.
- Sharable data fields
- Multiple products within one set or batch

Minimum recommended co	mputer configuration
Computer	IBM-compatible PC
Processor	Intel Pentium® processor, 400 MHz minimum
RAM	64 MB minimum (128 MB for Windows NT, 2000 and XP)
Operating system	Windows 95, 98, ME or NT (Service pack 6), 2000 and XP
Disk space required	25 MB minimum
Other technical information	
Barcode types	Codabar, code 39, code 93, code 128, EAN-13, EAN-8, UPC-E, Interleaved 2/5, ITF (DUN14), PDF 417, DataMatrix
Company logo or graphics	Can be imported in BMP, PCX, MSP, WMF, JPG, JIF, GIF formats
Text and graphics	Can be rotated, moved or resized
Ordering information	

Tyco Electronics Wire Marker Printing Software - Windows, 32 bit

Catalog	1654227
Revised	04-07

Ordering description

TMS-WINTOTAL-SWARE

Product description

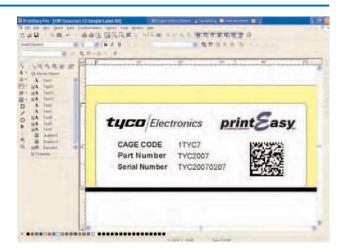


Software

### PrintEasy Label printing software

Tyco Electronics PrintEasy is a powerful yet easy to use Windows based label design and printing software. With PrintEasy you can quickly and easily combine bar codes, text and graphics into professional quality labels. Carefully organized menus and pop-up dialogs display all your options in plain, easy to understand words.

The true WYSIWYG display allows you to create and view your labels with precision, giving you total control over your labels' appearance before printing. PrintEasy is ideal for use with the Tyco Electronics range of thermal transfer printable pressure sensitive label products. PrintEasy is pre-loaded with all of Tyco Electronics's standard thermal transfer label templates, which allows you to simply select the Tyco Electronics part number you want to print and you are ready to go!



#### **Features and Benefits**

#### Support

- Free technical support
- OS Support: Windows 95, 98, ME, NT, 2000, XP
- International language support

#### Label design

- True WYSIWYG label design and display
- Built-in printer font support
- Windows True Type fonts
- Reverse (white on black) text printing
- Align text left, right, justified or center
- Unlimited Undo/Redo command
- Lines, boxes and graphic images
- Import graphics in BMP, JPG, TIF, PCX, DCX, DIB, EPS and others
- Resize, rotate and stretch objects
- Thumbnail preview of saved labels.
- Metric and US measurement systems

#### **Bar codes**

- Numerous 1D and 2D symbologies
- Unlimited width and height
- Sequentially numbered bar codes
- Place characters above or below bar codes or do not print
- Option to display Start/Stop characters
- Able to print MIL-STD-130 UID Syntax

### Printing

- Printer-based bar codes and serial numbers
- Speed optimization using repetitive data control
- Local or network printer support
- Performance-enhancing printer controlled serialization
- Number of identical or serialized copies selectable from database

Specifications

TTDS-093



### **PrintEasy Label printing software**

### Features and Benefits (continued)

### Serialization

- Increment or decrement by any interval
- Separate Rollover/Rollunder and Value Reset options
- Preserve or expand field length when rolling over
- Numeric, alphanumeric and custom base serialization

### **Database options**

- Microsoft ODBC support, including: Access, Btrieve dBase, Excel, Oracle, Paradox, Clipper, FoxPro, Interbase and more.
- ASCII text files
- SAP (mySAP.com and R/3)
- Versatile multiple-table data access
- Import variable graphics from databases
- Data query wizard
- Individual record-picking at print time

### Data management

- Visual Basic scripting for custom data processing
- User-definable minimum and maximum field lengths
- Customizable data-entry filters and error checking
- Multi-data source selection per label object
- Easy entry of special and unprintable control characters
- Sharable data fields
- Customizable message box handling

### Integration

- Command line interface option
- Pre-loadable into "background" to avoid start-up delays
- Dynamically selectable label formats and data sources
- Error logging

Minimum recommended computer configuration							
Computer	IBM-compatible PC						
Processor	Intel Pentium® processor, 200 MHz minimum						
RAM	32 MB minimum						
Operating system	Windows 95, 98, ME or NT (Service pack 6), 2000 and XP						
Disk space required	15MB to 80 MB minimum (depending on installation options)						

Ordering information	
Ordering description	Product description
PRINTEASY-BASIC	Tyco Electronics Label Printing Software – Windows, 32 bit version for Laser and Inkjet printers**
PRINTEASY -ECC4	Tyco Electronics Label Printing Software – Windows, 32 bit version for Laser, Inkjet, ECC4 and T200 printers**
PRINTEASY-PRO	$Tyco\ Electronics\ Label\ Printing\ Software\ -Windows,\ 32\ bit\ version\ for\ Laser\ and\ Inkjet\ and\ Full\ Thermal\ Transfer\ support$
PRINTEASY-SUITE	Tyco Electronics Label Printing Software – Windows, 32 bit version for Laser and Inkjet and Full Thermal Transfer support
	with additional modules
PRINTEASY-NET05	Tyco Electronics Label Printing Software – Windows, – Network version with 5 user license
PRINTEASY-NET10	Tyco Electronics Label Printing Software – Windows, – Network version with 10 user license

<sup>\*\*</sup>Available in Europe, Middle East and Africa

### **Application Systems**

### HL2010E/HL1910E

The HL2010E and HL1910E Hot air heaters are designed to work with a standard line voltage (230V) on a wide variety of Raychem heat-shrinkable products. These tools are suitable for occasional use and are not recommended for applications requiring high duty cycles. Both tools supply forced hot air with an adjustable heat setting to meet the requirements of many different installation situations. A three position switch controls the air flow (150/300/500 l/min).

The HL2010E tool is switched on and off at the three-stage switch and the temperature can be continuously adjusted over a range of  $50^{\circ}\text{C}$ - $630^{\circ}\text{C}$  by the pushbuttons. The temperature can be increased or reduced by  $10^{\circ}\text{C}$  steps. An LCD display shows the actual temperature.

The HL1910E tool is switched on and off at the two-stage switch and the temperature can be continuously adjusted over a range of  $50^{\circ}$ C -  $600^{\circ}$ C at the thumbwheel (the numbers on it serve as a guide only, 1 means  $50^{\circ}$ C and max. temperature of  $600^{\circ}$ C is attained at 9).

A bench stand allowing use of both the HL2010E and the HL1910E as a bench tool is available as an option. Furthermore, it requires only two reflectors to cover most applications of heat-shrinkable tubing and SolderSleeve terminations.

\*Available in Europe only



#### **Specifications**

 Voltage
 230V AC

 Power
 2000W

 Air flow
 150 - 500 l/min

 Weight
 920g

 Length
 280mm

 Noise
 <70 dB</td>

Product description	PCN
HL2010E-230V-Euro	C99451-000
HL2010E-230V-UK	A22932-000
HL2010E-Kit-230V-Euro	A23120-000
HL1910E-230V-Euro	F30529-000
HL1910E-230V-UK	F11734-000
HL1910E-Kit-230V-Euro	A93538-000
HL1802E-074616-SolderSleeve	832011-000
Terminators Reflector	
HL1802E-070519-Heat-shrinkable	022611-000
Tubings Reflector	
HL1802E-070618-9mm Adaptor	930321-000
HL1802E-070717-14mm	868259-000
Reduction Nozzle	
HL1802E-070816-20mm	613361-000
Reduction Nozzle	
HL1802E-ADAP-PR-Adaptor	444817-000
for PR Series Reflector	
HL1802E - Bench-Std	717083-000
	HL2010E-230V-Euro HL2010E-230V-UK HL2010E-Kit-230V-Euro HL1910E-230V-Euro HL1910E-230V-UK HL1910E-230V-UK HL1910E-Kit-230V-Euro  HL1802E-074616-SolderSleeve Terminators Reflector HL1802E-070519-Heat-shrinkable Tubings Reflector HL1802E-070618-9mm Adaptor HL1802E-070717-14mm Reduction Nozzle HL1802E-070816-20mm Reduction Nozzle HL1802E-ADAP-PR-Adaptor for PR Series Reflector

The HL2005E heatgun is supplied with a 3 year warranty statement by Steinel. This warranty does not apply when used in a manufacturing environment as opposed to a DIY environment. The 12 month warranty usually offered by Tyco on all tooling applies (see conditions in warranty statement).



### **AMP-TY Nylon cable ties**

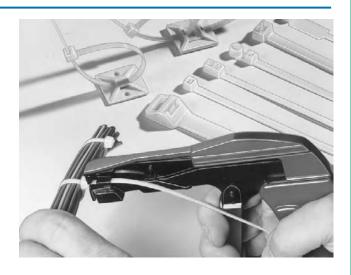
AMP-TY All-Nylon Cable Ties provide a strong, durable way to bundle and harness cable quickly and economically. They can be used on virtually any bundle configuration, in diameters ranging from 1/16 [1.58] to 10 [254.00]. AMP-TY Cable Ties are resistant to common solvents, alkalies, dilute acids, oils and greases.

All packages are heat sealed to retain moisture. Do not open package until you are ready to apply the ties.

### Features and benefits

- Self-locking application by hand or hand tool provides versatility
- Tapered tip speeds up threading and reduces applied cost
- Interior serrations help hold individual wires in place through friction
- Tough, smooth nyon may be used in outdoor and indoor applications. Black, UV-resistant ties are rcommended for outdoor use
- Specific parts meet the requirements of MIL-S-23190. See MS3367 and MS3368 part number notations
- All-nylon design eliminates metal components
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E73541





### Fast and Easy to Apply



1. Gather cables together.



2. Apply hand-tight.



3. Snug-up with tool.



4. Finished tie holds cables firmly.

Application Systems



### Cable Marker Tools and Accessories

### **AMP-TY Nylon cable tie accessories**

# Cable Tie Mount (Screw Type)

Accommodates ties with maximum tensile strength of 50 lbs. [222.5 N]

**Part No. 1-350087-0** Package of 100

Part No. 2-350087-0 Package of 1000 Note: Screw not included



Permits entry from two sides. Available in two sizes.



 $0.38\,[9.65]\,\times\,0.6\,[15.24],\,\#6$  Screw Hole, without Adhesive Back. Accommodates ties with maximum tensile strength of 50 lbs. [222.5 N]

Part No. 608801-1 Package of 100

1.13 [28.70] x 1.13 [28.70], #6 Screw Hole, with Adhesive\* Back. Accommodates ties with maximum tensile strength of 50 lbs. [222.5 N]

Part No. 608800-1 Package of 100



Permits entry from four sides. Available in two sizes. 0.75 [19.05] x 0.75 [19.05], two #4 Screw Holes, with Adhesive\* Back. Accommodates ties with maximum tensile strength of 30 lbs. [133.5 N]

Part No. 608802-1 Package of 100

1.13 [28.70] x 1.13 [28.70], two #8 Screw Holes, with Adhesive\* Back. Accommodates ties with maximum tensile strength of 50 lbs. [222.5 N]

Part No. 608803-1 Package of 100

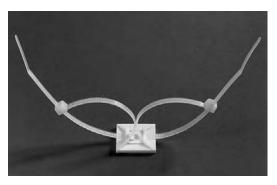
Cable Tie Swivel Mount with Adhesive Back and Screw Holes (0.187 [4.75] Dia.)

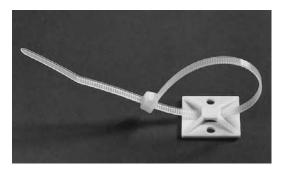
1 [25.4] x 1 [25.4], two 0.187 [4.75] Dia. Screw Holes, with Adhesive Back. Accommodates ties with maximum tensile strength of 30 lbs. [133.5]

Part No. 607847-1 Package of 100

\*The rubber-based adhesive backing on these mounts has a tensile strength of 6 lbs. [26.7 N] per square inch. This rating applies in temperatures from -50°F [-45°C] to 180°F [82°C]. For best performance, mounts should be applied to a smooth, clean, dry, and oil-free surface.









## AMP-TY Application Tool

Economy Application Tool Part No. 734587-1 (Color — blue) IS 408-8816

Tool operates on cable ties up to 50 lbs. [222.5 N] tensile value. It has a tensionadjustment and cuts off the end of the tie.



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Catalog 1654227 Revised 04-07 Dimensions <u>not</u> italicized are in millimeters while dimensions in inches are italicized

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-5-729-0425 South America: 55-11-3611-1514 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-141-810-8967



### **Engineering Notes**

