



ETHERNET CABLE STRIPPING & CRIMPING MACHINE (ESM-10)

Product Brochure

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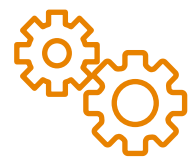
TE Connectivity's (TE) new ethernet cable stripping & crimping machine (ESM-10) improves efficiency, quality and is a cost-effective solution for ethernet twisted pair cable processing in data connectivity wire and harness applications. This machine offers cable loading, cable zero cutting, stripping, crimping and a vision inspection function. The AI vision inspection feature can check the stripping quality, count the conductor's number, re-align the cable position and assess the final crimping quality. If there is an issue with the wire or crimping quality, an alarm will notify the operator and unload the cable or stop to cut the cable. This machine can offer flexible configurations covering different products, including MATenet and GEMnet cable assemblies and can easily extend to future data connectivity products. This cost-effective, compact sized, one machine solution can cover full ranges of both coaxial and differential products while enabling a quick changeover time of less than 15 minutes.



Quality Management



Flexible Configuration



Cost Effective

Key Features	Benefits
Quality Management	<ul style="list-style-type: none"> AI vision inspection function <ul style="list-style-type: none"> Assesses cable quality Assesses the conductor's number Realigns the cable position Final checking crimping quality Integrated force and displacement sensor monitoring the crimp quality Color sensor checks the cable color
Flexible Configuration	<ul style="list-style-type: none"> Supports MATenet and GEMnet cable assemblies with applicator changes and software configurations Can upgrade non-vision machines to include the vision inspection function Can easily extend to future data connectivity products
Cost Effective	<ul style="list-style-type: none"> One machine solution covers differential products Quick changeover time is less than 15 minutes avoiding production down time

Industries

- Automotive
- Industrial & Commercial Transportation
- Industrial

Applications

- Data Connectivity
 - Systems
 - Infotainment
 - Safety
 - In-vehicle networks

Technical Details

Technical Specifications				
Cross-sectional Range	0.13 – 0.35 mm ² (AWG 26 – 22)			
Outer Jacket Range	3.2 – 6 mm (0.13 – 0.24 in)			
Jacket Strip Length	8-15mm			
Strip Length	2-6mm			
Resolution of Stripping Unit	0.01 mm (0.0004 in)			
Resolution of Cable Clamp	0.2 mm			
Crimping Force	20 kN			
Motor Power	2 kW			
Drive	Servo motor drive			
Stroke	40 mm (1.5748 in)			
Shut Height	135.78 mm (5.3457 in)			
Noise Level	< 80 dB (A)			
Ambient Temperature	10 – 40°C while operating			
Certification	CE			
Dimension	1500*940*2167(W*D*H)			
Weight	350Kg			
Power	220V, 1P+N+PE, 50-60Hz			
Air Pressure	Min 0.4Mpa			
Working Condition Relative Humidity	10-90%			
Storage Environment Relative Humidity	30-60%			
Wire Diameter	0.35mm ²	0.17mm ²	0.13mm ²	0.22mm ²
Machine, With AI Vision				
Cycle Time (Excluding the Loading & Unloading)	5s	5s	6s	5s
Cycle Time(Including the Loading & Unloading)	7s	6.5s	8.5s	7s
Machine, No Vision				
Cycle Time(Excluding the Loading & Unloading)	3.5s	3.5s	4.5s	3.5s
Cycle Time(Including the Loading & Unloading)	5s	5s	6s	5s

Ordering Information

Specifications	
PN 2468544-1	Ethernet SC Mach ESM-10, with AI vision
PN 2468544-2	Ethernet SC Mach ESM-10
PN 2474584-2	OCEAN Applicator, ESM-10, MATenet Male
PN 2474601-2	OCEAN Applicator, ESM-10, MATenet Female
PN 2474602-2	OCEAN Applicator, ESM-10, GEMnet Male
PN 2474603-2	OCEAN Applicator, ESM-10, GEMnet Female

Connect With Us

Our tooling is supported by an established, experienced and responsive field service organization. TE Connectivity field engineers are located worldwide and are available to assist with on-site and remote service; selection and installation of new equipment; training; and technical support. Service agreements are available to provide protection and support for all your application tooling equipment.

Contact Us

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Tooling Portfolio: tooling.te.com

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