

HMN DATA AND POWER/SIGNAL HIGH DENSITY MODULES

HDC HMN modular system, designed for harsh environment and industrial applications, already offers various options for power, signal and data connections. The new addition will enable HDC HMN system to serve robotics and automation applications.

HMN D3-2/6 shielded data modules support high speed data transfers (Cat5e) and provide high signal integrity thanks to the individual shielding of each ethernet pair.

Available in configurations with two or six contacts in each circular insert and with up to three inserts in a single HMN module, they enable high density of ethernet connection in the smallest module size.

Providing fast real-time connections and compatible with TE's existing HMN modular system, the new HMN solution can be used to provide complete customized interface for hybrid cable connections between control cabinets and robots or movable parts of the automation line.

HMN 3/4 high density module provides compact solution for power and signal connection in a single module. 3 power contacts 40A and 4 signal contacts 10 A are robust solution to drive motors and breaks with half of the space required.

BENEFITS

- **HMN-D3-2/6-M/F shielded data module:**
  - Compatible with the existing TE HDC HMN modular system
  - Circular shielded module
  - Possible configuration of 2 and 6 contacts in 1 insert
  - Up to 3 inserts in a single module providing highest density in a minimum space:
  - Applicable for the use with shielded cables (power, signal, data)
  - High signal integrity due to individual shielding of each ethernet pair
- More efficient and simplified assembly process comparing to other solutions with shielded modules
- **HMN 3/4 high density power / signal module**
  - Robust and space efficient combination of high power and signal connection in a single module
  - Compatible with the existing TE HDC HMN modular system
  - Suitable for hybrid power cables

KEY FEATURE

- **HMN-D3-2/6-M/F Shielded data module:**
  - Cat5e data element
  - **Rated Current:** 1.2A
  - **Voltage:** 30V
  - **Pollution Degree:** III
- **Operation Temperature:** -20°C ~+125°C
  - Crimped termination for conductors of 0.14 mm^2 up to 1.0 mm^2 for 2P module and 0.03 mm^2 up to 0.34 mm^2 for 6P module
- **HMN high density power / signal module**
- **Power:**
  - **Rated Current:** 40A
  - **Voltage:** 830V
  - **Temperature range:** -40°C ~+125°C
  - **Protection Degree:** 3
  - **Overvoltage Category:** III
  - Crimped termination for conductors 1.0 mm^2 up to 6.0 mm^2
- **Signal:**
  - **Rated current:** 10A
  - **Voltage:** 830V
  - **Pollution Degree:** 3
  - **Operation Temperature:** -20°C ~+125°C
  - Crimped termination for conductors 0.14 mm^2 up to 2.5 mm^2

APPLICATIONS

- **Robotics:**
  - Data connections
  - Motor and break systems
  - Digital feedback
- Automation
- Machinery

MECHANICAL

- **EN 61984:** Connectors - Safety requirements and tests
- **IEC 60068:** Environmental testing
- **IEC 60512:** Connectors for electronic equipment - Test and measurements
- **IEC 60529:** Degrees of Protection Provided by Enclosures (IP Code)

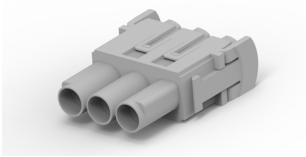
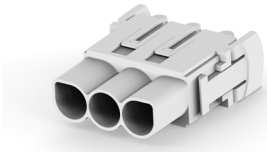
ELECTRICAL

- **IEC 60512:** Connectors for electronic equipment -Test and measurements
- **EN 60352-2:** Solderless connections - Part 2: Crimp connections - General requirements, test methods and application guidance
- **IEC 60512:** Connectors for electronic equipment - Test and measurements

STANDARDS

- IEC 60664-1: Insulation coordination for equipment within low-voltage systems (Part 1)
- ISO 6988: Metallic and other non-organic coatings - Sulfur dioxide test with general condensation of moisture

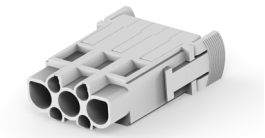
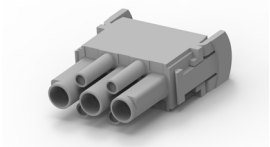
PART NUMBER LIST HMN D3-2/6 DATA MODULE

	Part number	Description
	T2115032101-000	HMN-D3-2/6-M (male module)
	40.A703.00	606 ETHERNET ELEMENT CAT 5 (6 pos. data insert)
	61.252.11	CONTACT PIN 0.6 MM
	40.A722.00	210 DATENELEMENT CAT 5 (2 pos. data insert male side)
	61.253.11	CONTACT PIN 1 MM
	T2115032201-000	HMN-D3-2/6-F (female module)
	40.A702.00	606 ETHERNET ELEMENT CAT 5 (6 pos. data insert female side)
	60.278.11	CONTACT SOCKET 0.6 MM

HMN data and power/signal high density modules

	Part number	Description
	40.A711.00	210 DATA ELEMENT CAT 5 (2 pos. data insert female side)
	60.279.11	CONTACT SOCKET 1 MM

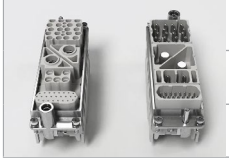
PART NUMBER LIST HMN-3/4 POWER/SIGNAL MODULE

	Part number	Description
	T2111342101-000	210 DATA ELEMENT CAT 5 (2 pos. data insert female side)
	T2040001015-000 T2040001025-000 T2040001040-000 T2040001060-000 T2040001100-000	CMM-1.5 CMM-2.5 CMM-4.0 CMM-6.0 CMM-10.0
	T2020001002-000 T2020001005-000 T2020001008-000 T2020001010-000 T2020001015-000 T2020001025-000	CDM-0.3 (0.14-0.37mm) CDM-0.5 CDM-0.75 CDM-1.0 CDM-1.5 CDM-2.5
	T2111342201-000	HMN-3/4-F (female module)
	T2040002015-000 T2040002025-000 T2040002040-000 T2040002060-000 T2040002100-000	CMF-1.5 CMF-2.5 CMF-4.0 CMF-6.0 CMF-10.0
	T2020002002-000 T2020002005-000 T2020002008-000 T2020002010-000 T2020002015-000 T2020002025-000	CDF-0.3 (0.14-0.37mm) CDF-0.5 CDF-0.75 CDF-1.0 CDF-1.5 CDF-2.5

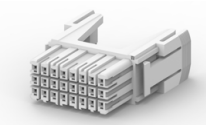
The following HMN options are compatible with new modules:

Data modules	
	HMN-RJ45
	HMN-USB
	Quintax-001
	Quintax-004
	Quintax-008

Power modules	
	HMN-001 200A
	HMN-D2 100A
	HMN-002 70A
	HMN-003 40A
	HMN-004 40A

Special modules	
	HMN-PA-2 (pneumatic)
	HMN-PA-3
	HMN-DM (blind module)

Signal modules	
	HMN-H2 16A
	HMN-005 16A
	HMN-006 16A
	HMN-008 16A
	HMN-012 10A
	HMN-017 10A
	HMN-020 16A
	HMN-025 5A

Dynamic modules Stamped & Formed contacts	
	HMN-HD1-48
	HMN-HD1-24
	HMN-HD3-10
	HMN-HD4-6
	HMN-HD5-3

For the complete HMN modular system, refer to: TE.com/HDC

te.com

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