

EMBEDDED SYSTEMS



DESCRIPTION

The embedded systems are tested and certified hardware platforms, where the firmware can be easily customized. DTI offers a wide range of systems and solutions, which allow meeting most of the market's requirements.

There are many advantages of embedded products: the time reduction of the design and delivery and, not least, the cost reduction project and product, especially on medium/small volumes.

Product presentation

DEM1. Lightweight and compact, it is the smallest in this product category. The DEM1 is suitable for applications with few components as it is able to control up to 3 elements in high voltage and handle both analog and digital inputs.

Some applications: level control tanks and boilers, small appliances, water treatment systems for reverse osmosis, etc.

DEM2. This product has good performances even if it has minimum dimensions. It can handle up to 5 high voltage outputs, two temperature

settings with SSR, multiple analog and digital inputs. It also provides a communication port RS232 / 485.

Some applications: single serve coffee machines, level and temperature management in boilers, multiple groups dispensers with adjustable temperature, dishwashers, etc.

DEM5. It's a product with high performance. It can activate up to 12 high-voltage components and connect easily with other electronic interfaces thanks to the MODBUS communication. Moreover the large number of digital and analog inputs allows the product to easily read sensors or external devices.

Some applications: professional coffee machines, machines for beverage distribution, machines for ice cream production, etc.

DEM6. This product is supplied at 24 Vdc and is able to manage a huge number of I/O to the supply voltage. The DEM6 is a suitable platform for high-end products because of its communication systems push and its multiple controls. Some applications: vending machines, automatic coffee machines, etc.

TECHNICAL FEATURES	DETAILS	DEM 1	DEM2	DEM 5	DEM 6
EMBEDDED SYSTEMS					
Power Supply	230 Vac \pm 10% 50/60 Hz	V	v	v	
	115 Vac \pm 10% 50/60 Hz	V	v	v	
	24 Vcc				v
High voltage Output	single output Relay - 16A / 250 VAC Resistive	1		2	
	single output Relay - 5A / 250 VAC Reistive	2	3	7	3
	Single output Triac 3 A /250 Vac Resistivi		2	3	
Analog Low voltage input	TOTAL	2	4	8	6
	Max inputsfor level water probes	2	2	4	2
	Max inputs for temperature probes		2	4	4
Digital Low voltage input	TOTAL	3	8	29	12
	Digital input powered	1	3	5	10
	Digital input no powered	2	8	29	2
Low voltage outputs	TOTAL	2	8	29	25
	Led di segnalazione 5Vcc	1	5	24	4
	Audible allarm	1		1	1
	PWM output 24 Vcc		1	1	1
	Solid state relay output		2	3	3
	Motor driver				1
	24 Vcc outputs (Max 18W)				15
	Type of comunciations	TTL RS 232	v	v	v
	RS485 Modbus		v	v	v
Enclosure dimensions	DTI Compact (73,5 mm x 45,4 mm x 75 mm)	v	v		
	DTI XL (130mm x 120 mm x 55 mm)			v	v
Possible controls	Dose with flow meter	v	v	v	v
	Water Level control	v	v	v	v
	Stepper motor		v	v	v
	PID regulation of temperature/pressure		v	v	v
Type of connections	male faston connector 6,3	v	v	v	v
	male connector 5mm pitch	v	v	v	v
	male connector 2.54mm pitch	v	v	v	v
Enclosure material	PVC V0				
Operating Conditions	0 ... +50°C with relative ambient humidity: 30 ... 85 % (no condensing)				
Storage Conditions	- 20 ... + 80 °C, with relative ambient humidity: 30 ... 85 % (no condensing)				
Assembly type	Panel fixing with a maximum diameter \varnothing 3,8mm				

