

Armilis Trusted Collector

1) Technical Features

Power

MODEL TYPE	ARM-TCL-DGIO-1
Input Voltage	12 to 24Vdc (Fuse protection (2.5A) Polarity protection)
Input rated voltage	24Vdc
Rated Power	30 W
I max.	1.5A
Size	100x45x115
Communication interfaces	WiFi, Ethernet



Data acquisition options

Digital data	3.3 to 24 Vdc Input Impedance: 27K Separated PCB ground Rated Voltage: 10Vac 220 Vac (3 – 48 Vdc) Input Impedance: 54K Rated Voltage: 220 Vac Imin: 2 to 12 mA Opto-isolation Rated Voltage: 24 Vdc Anti-polarity + Overcurrent (220 Ac)
Available standard analog sensors	Armilis standard temperature probe. Armilis standard humidity probe
Available communication ports	Modbus RTU Serial RS485 (* requires configurations) I2C (* requires configurations)

Data Output options

The following are the options for the data flow after a single point is acquired

Armilis Cloud data upload	The payload (datapoint + source certification data) is transmitted to Armilis' cloud, blockchain-certified and left available through APIs
Custom cloud upload	The payload (datapoint + source certification data) is transmitted to a client's custom endpoint. The client can forward the data to Armilis for blockchain-certification or storage
Custom cloud upload with separate Certification Data	The payload (datapoint + source certification data) is transmitted to a client's custom endpoint. The client can verify the signatures and forward only signature data to Armilis for blockchain-certification

Cryptographic functions

Type	Asymmetric
Scheme	ECC-P256
Location	In-hardware
Public key recovery	Physically printed on device

Configuration methods & parameters

The configuration is done via the Armilis' portal. At the first internet connection the configuration is loaded.

Available parameters

Port configuration	Specify what ports and what acquisition method to use
Sensor Configuration	Specify which armilis standard sensors are connected

Acquisition configuration	Specify the parameters for data acquisition
Data transmission configuration	Specify what data, where and when to transmit

Acquisition functions

Threshold value - rising	Creates a record when a value is reached (climbing)
Threshold value - falling	Creates a record when a value is reached (decreasing)
Value change - rising	Creates a record when a digital input goes from 0 to 1
Value change - falling	Creates a record when a digital input goes from 1 to 0
Time-based polling	Creates records at a defined interval

Ratings

Power supply voltage	12 to 24Vdc
Operating voltage range	11.4 to 25.4Vdc
Power consumption	30 W MAX.
Insulation resistance	20M Ω min.at 500Vdc between the AC terminals and the protective earth terminal
Dielectric strength	2.300 VAC at 50/60 Hz for one minute with a leakage current of 10mA max. Between all the external AC terminals and the protective ground terminal.
Shock resistance	80m/s ² in the X, Y and Z direction 2 times each.
Ambient temperature (operating)	0o to 60oC

Ambient humidity (operating)	10% to 90% (no condensation)
Ambient environment (operating)	With no corrosive or explosive gas
Ambient temperature (storage)	-20°C to 60°C
Power supply holding time	2ms min.
Weight	295g max.