

# **ELECTRONIC SYSTEMS**

SMART KAN INTERFACE MODULE - SKIM



### **AT A GLANCE**

- Family of configurable and expandable input/output (I/O) Modules
- 2 or 8 I/O as standard
- CAN bus Communications
- I/O's can be any combination of analog or digital inputs, frequency generator or pulse width modulated (PWM) outputs
- User-Friendly Windows based PC Configuration Tool
- 12/24 V Compatibility
- J1939 or NMEA 2000 CAN protocols are supported
- Integrated Metri-Pack connectors

## **Product Description**

The SKIM (Smart KAn Interface Module) is the perfect platform to empower your electronics with flexibility and control. The SKIM module provides engineers with the flexibility and freedom to design electronic control systems for vehicular applications and stand alone applications. This unique product is a flexible module that interfaces between external devices and a CAN (J1939) network. The SKIM is a family of modules with configurable I/O's (Input/Output) that accept either analog, digital or frequency input signals or can generate frequency or PWM output signals, and can communicate with other CAN-based modules.

Each I/O can be individual configured as either an Input or an Output with KA's user friendly PC Configuration Tool. The SKIM is also designed for universal (12/24VDC) applications.

These compact, fully sealed units are IP67 rated to provide extended service life in the harshest environments. The SKIM is available in either 2 or 8 I/O's (depending on model), and have integrated mounting holes and wire tie locations for easy mounting in any application. There are several accessories available for the SKIM including a PC Configuration Tool, mating connector kits and wiring harnesses.

#### Contact:

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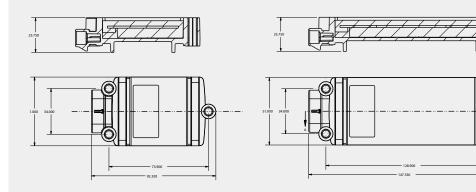
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## **Product Specifications**

### Mounting and dimensional information



# Specifications and technical data

	Virtual Instrument	Signal Level	Frequency Range	Resolution	Accuracy	
Digital Pulse Counter: Frequency Input Mode	Pulse Counter Frequency Meter	4 to 32V	1 to 2500 Hz	50 ns	± 0.01%	
Digital Input Mode	Virtual Instrument	Signal Level				
	Switch Input	4 to 32V				
Digital Input Mode	Virtual Instrument	Range	Resolution	Accuracy		
	Volt Meter	0 to 12V 0 to 32 V	12mV 32 mV	± 1% ± 2%		
Resistance Mode	Virtual Instrument	Range	Accuracy	Precision		
	Ohm Meter	0 to 400 Ω	± 2%	±1Ω		
Current Input Mode	Virtual Instrument	Range	Accuracy	Precision	Shunt to GND	
	Amp Meter	0 to 25 mA	± 1%	± 50 uA	200 Ω	
OUTPUTS						
PWM Output Mode	Virtual Instrument	Range	Resolution	Accuracy	Optional Pull Up Load	Duty Cycle
	PWM Output	0.067Hz to 25 kHz	50 ns	± 0.01%	6.8kΩ	16 Bits
Frequency Output Mode	Virtual Instrument	Range	Resolution	Accuracy	Optional Pull Up Load	Duty Cycle
	Square Wave Output	0.067Hz to 25 kHz	50 ns	± 0.01%	6.8kΩ	50%
Digital Output Mode	Virtual Instrument	Optional Pull Up Load	Low Level Sink Current			
	Low Side Output	6.8kΩ	750 mA			
COMMUNICATIONS						
CAN Interface	Data rate (baud)	Arbitration	Bytes	Repetition Rate Transmission		
	Low Side Output	29 Bits (2.0B)	8	10 ms to 2 s		
PC CONFIGURATION T	OOL / STARTER KIT	& PART NUMBER	RING INFORMATI	ON		
DG 6 11 - 1						
PC Configuration Tool -	- Separate: Part Nun	nber - SU1463:				
Starter Kit (Contents): Part Number - E02723  - PC Configuration Tool CD  - 2 I/O SKIM  - 8 I/O SKIMv  - Programming Harness  - 10 Hours of Technical Support			Individual SKIM Part Numbers 2 I/O SKIM: Part Number - E02427 8 I/O SKIM: Part Number - E02619			

#### At a Glance

- PowerSupply: 9-32VDC
- Power Consumption: 50 mA
- Operating Temperature -40 to + 85°C (-40 to 185°F)
- Storage Temperature -40 to + 85°C (-40 to 185°F)
- Reverse Polarity Protected
- Jump Start ISO 15003-Section 5.14.2
- ISO 11452-2. 80MHz 1000MHz, 100v/m category C
- Load Dump ISO 7637-2:2004
   AMD1: 2008 24V System Level 4
- EMS ISO 7637-2:2004 AMD1: 2008 24V System Level 4
- EMI CISPR 25, ISO 14982
- ESD ISO 10605: 2008 ±8kV contact, ±15kV air
- Water Tightness IP67 with connector
- Chemical Compatibility SAE J1455 – Section 4.4
- Mating Delphi Metri-Pack
   Series Connectors:
   #12162210 6 pin
   #12162260 6 pin
   #12162261 6 pin
- Mating Delphi GT Series 150
  3.5mm Centerline Connectors:
  #15491547 3 pin
  #15373426 3 pin