



## DATASHEETS: RPM TRANSMITTERS DOC NO: A-ISO-DS-RPM-2016-1005

## Isolating RPM Transmitter cum Indicator and RPM Sensor:



**ISOLATING RPM INDICATOR CUM** 

TRANSMITTER

Product Code: A-ISO-DC-F-C1-LD-PM



RPM SENSOR Product Code: ASD-RPMS-1005-MS



Isolating RPM Transmitter Product Code: A- ISO-DC-F-C1-S

Inductive RPM Sensors Accurately sense Pulses made by Tooth Wheel fitted on the Shaft whose RPM is to measured. This essentially is a varying Frequency Signal which is then given either Isolating RPM Transmitter or RPM Indicator Transmitter. The signal is conveted to standard 4-20mA and then transmitted to the Controller. Local Diplay can be seen on the Indicator.

Datasheet: Common General Specificati	ons:			
Enclosure				
Shape	:	Rectangular		
Material	:	ABS		
Dimensions (mm)	:	Length: 107.5, Height: 75mm; Width: Varies as per information or 96 x 48 x 110mm Din Standard Pane		ecified in product coding
Mounting	:	Din Rail Mounted / Panel Mounted		
Ingress Protection	:	IP 40, Shock and Contamination Proof.		
Flammability	÷	Class V0 according to UL 94.		
Specifications which vary with	th Se		Transmitter	Indicator Transmitter
Ambient Temperature		-20°C to 55°C	Yes	Yes
Power Supply		20 0 10 00 0	100	Yes
Power Consumption		For all Isolation Products is less than	1W	4.2W
Power Supply Voltage can be	:	16 to 36 VDC. Recommended 24 VDC	Yes	Yes
chosen as either AC Mains or	·	85 to 265 V AC 50 – 60 Hz	Yes	Yes
DC				
Power Supply Side Isolation	:	3 Point Isolation. Rail Power Supply of 24 VDC is internally isolated from Input and Output Circuitry.	Yes	Yes
Protection		Reverse Voltage Protection.	Yes	Yes
Signal Isolation		Neverse voltage i roteolion.	100	105
Isolation Barrier Voltage	:	VDC	3500	3500
Isolation Type	÷	Isolation Technology used	Optical	Optical
Input and Output	•	Isolation reenhology used	Optical	Optical
Input Signal		Frequency: 0 – 100 KHz	Yes	Yes
Input Signal	:	Reverse Loop Protection	Yes	Yes
Protection	·	EMI Filtering and Protection	Yes	Yes
Protection			Yes	Yes
Output Oissa al		RFI Filtering		
Output Signal	÷	DC Current: 4 to 20 mA	Yes	Yes
		DC Voltage: 0 to 10 VDC	Option	NA
			Selectable	050.01
Maximum Load Permissible for Current Output	:	Value at 24 VDC Power Supply.	650 Ohm	650 Ohm
Maximum Non-linearity	:	Value with respect to Full Scale Range at maximum ambient temperature.	± 0.1%	± 0.1%
Output Calibration		Linearity trim set on fascia – Slope Adjust.	Yes	Yes
Display	:	4 Digit LED	NA	Yes
RPM Sensor				
Туре	:	Inductive		
Excitation Voltage	:	24 VDC		
Enclosure	:	Diameter: 33mm, Length: 100mm, Threading: 1" B	SP, 10mm Wide	Hex Collars for Mounting,

: Diameter: 33mm, Length: 100mm, Threading: 1" BSP, 10mm Wide Hex Collars for Mounting, Epoxy Sealed, Dust, Moisture and Ingress Proof. Material: Blackodized MS / SS 304.

YU Technologies Pvt. Ltd.

Registered Office: 315, A-1, 22, Manishanagar, Off Sahyadrinagar, Sangli-416 416, Maharashtra, India. Works: B 8/5, Opp. MSEB Substation, MIDC, Miraj - 416 410, Dt. Sangli, Maharashtra, India. T: + 91 233 6451802; F: +91 233 2644042; E: info@yutech.in, sale@yutech.in, W: www.yutech.in **ISOLATION PRODUCTS** 

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DATASHEETS FOR RPM TRANSMITTERS

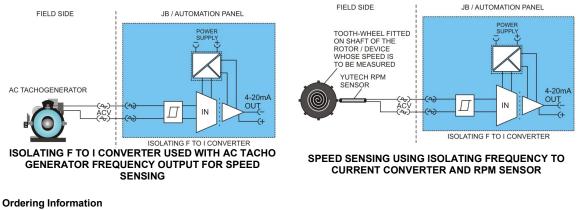


**Speed Sensing using Frequency to Current Converter:** Frequency Converter converts Frequency Signals or Signal Frequencies to standard 4-20mA Current. Frequency Input of 0 – 100 KHz is Factory default setting At 5 VAC Peak to Peak is Standard Range. Other ranges maybe specified while ordering.

**Speed Sensing using RPM Sensor and Frequency to Current Converter**: YUTECH RPM Sensor coupled with Frequency to Current F to I Converter forms an accurate Speed Sensing Device. Tooth-wheel can be ordered by giving the Shaft Size and RPM or can be locally made / purchased by the end user as per our drawings. Sensor is powered by Auxilliary Power Supply of 5 VDC from the Converter which converts this Pulse Frequency Input created by the rotation of Tooth-Wheel into Standard 4-20mA Current which can be used for Control Application.

**Speed Sensing using AC Tacho-Generator and Frequency to Current Converter:** Converter can be directly connected to any AC Tacho-Generator (TG). The Frequency of the Output varies with respect to Speed of the TG. The Frequency to Current Converter converts Pulse Frequency Input into Standard 4-20mA Current which can be used for Control Application. Please mention the Maximum Voltage during ordering.

## YUTECH Isolating Indicator Display is used for Local Speed Indication and Transmission in below applications:



 Product Code (PC)
 Product Description

 A-ISO-DC-F-C1-S
 Isolating AC Signal Converter – Frequency to Current (4 – 20 mA).

 A-ISO-DC-F-V1-S
 Isolating AC Signal Converter – Frequency to Voltage (0-10VDC).

 A-ISO-DC-F-C1-LD-PM
 Isolating Indicator Display cum Transmitter - Frequency to Current (4 – 20 mA).

 A-ISO-AC-F-C1-LD-PM
 Isolating Indicator Display cum Transmitter - Frequency to Current (4 – 20 mA).

 ASD-RPMS-1005-SS
 RPM Sensor - SS Enclosure

 ASD-RPMS-1005-MS
 RPM Sensor - Blackodized MS Enclosure

## Product Coding (PC) Information:

Item Description	Item Code	Item Specification
Product Description	A-ISO	A-Series Isolator
Power Supply	DC	Power Supply Voltage 24 VDC.
Output	С	Output DC 4 to 20mA.
	V	Output 0 to 10 VDC.
	В	Bipolar Voltage Output -10 to 10 VDC.
Input	AM	Bipolar AC milli-Volt (-1000mV to 1000 mV) (Standard Range. Other maybe specified while ordering).
	AV	0 to 100 VAC (Standard Range. Other maybe specified while ordering).
	F	Frequency: 0 – 100 KHz (At 5 VAC Peak to Peak, Standard Range. Voltage upto 100 VAC maybe specified while ordering).
	U	Universal (For Display Unit only), supports Current, milli-Volt, RTD, TC Inputs
Display	LD	LED Display
Sensor	RPMS	RPM or Speed Sensor
Channels	1	Single Channel
	2	Two Channels (Enclosure may be Medium size for additional input or output channels)
Enclosure	S	Standard 22.5mm Width.
	М	Medium 45mm Width.
	PM	Panel Mounted Din Std 96 x 48 x 110mm.
Decoding the Product Code		A SERIES ISOLATOR
<b>3</b> • • • •		24 VDC POWER SUPPLY
		INPUT 0-100VAC, 1 CHANNEL
		OUTPUT 4-20mA, 1 CHANNEL
		ENCLOSURE WIDTH 22.5mm