DC V/I Signal to Frequency Signal Transmitter

ISO U(A)-P-O

Applications:

·DC signal converter to isolated frequency pulse signal
·Accurate digital voltage testing meters
·A/D isolated converter instruments
·Data testing and remote monitor instrument
·Analog signal data acquisition
·Ground interference control

Features:

·Change the input signal into unit impulse signal
·Efficiency grade: 0.1/0.2
·International standard signal input: 0-5V/0-10V/1-5V, 0-10mA/0-20mA/4-20mA,etc.
·Standard signal output: 0-5KHz/0-10KHz /1-5KHz and so on
·Extremely high linearity in whole process（Nonlinearity<2%）
·3KV isolation among Signal input/output/ Accessorial power supply

Model Selection:

ISO- U(A)□- P□- F□

Input rated voltage（or current）		Auxiliary Power P	Output F
	U1：0-5V	P1： DC24V	F1：0-5KHz (5V impulse)
	U2：0-10V	P2： DC12V	F2：0-10KHz (5V impulse)
	U8：Customized	P3： DC5V	F3：1-5KHz (5V impulse)
	A1：0-1mA	P4： DC15V	F4：0-5KHz (open collector)
	A2：0-10mA	P8：Customized	F5：0-10KHz (open collector)
	A3：0-20mA		F6：1-5KHz (open collector)
	A4：4-20mA		F8：Customized
	A8：Customized		

Example:

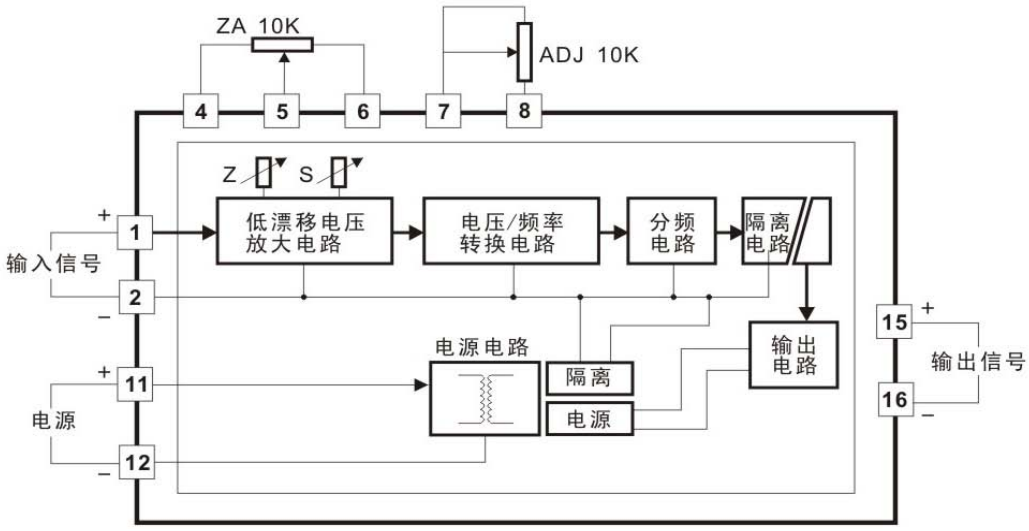
Eg1：input：0-5V	Accessorial power supply：24VDC	output：0-5KHz	Model：ISO-U1-P1-F1
Eg2：input：0-20mA	Accessorial power supply：5VDC	output：0-10KHz	Model： ISO-A3-P3-F2

General Parameters:

Efficiency ---------- 0.1%/0.2%	Isolation ---------- Signal input/output / Accessorial power supply
Accessorial power supply --------- DC5V/12V/24V	Insulated resistance ---------- ≥20MΩ
Operating Temperature ---------- -25 ~ +70℃	Comparison endurance ---------- Signal input/output/ Accessorial power supply
Operating humidity ---------- 10 ~ 90% (No condensing)	3KVDC，(50Hz/1min, leak current 1mA)
Storage temperature ---------- -45 ~ +85℃	
Storage humidity ---------- 10 ~ 95% (No condensing)	

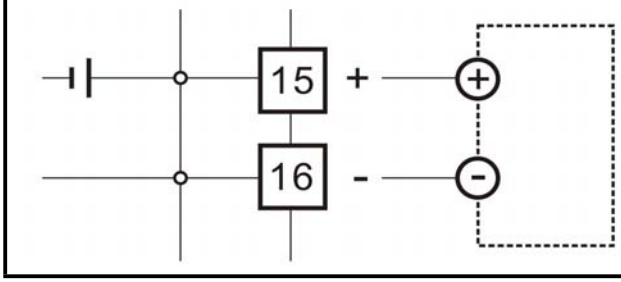
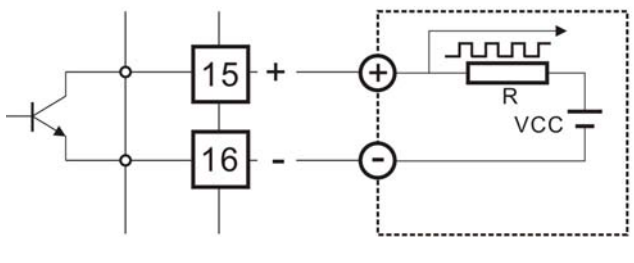
Input Parameter				Output Parameter		
Input	Input impedance	Power loss	Input over-load	Output	Output Parameter	Response time
0-5V	> 100KΩ	<1W	1.2 times : Continuous	F1: 0-5KHz(5V impulse)	High Level: 3.0-5.5V Low Level:Below 0.5V Load resistance: > 250Ω	≤50mS
0-10V				F2:0-10KHz(5V impulse)		
0-1mA	TYP：250Ω Customer chose			F3: 1-5KHz(5V impulse)		
0-10mA				F4: 0-5KHz (collector)	DC30V , 100mA （Resistance load）	
0-20mA				F5: 0-10KHz (collector)		
4-20mA				F6:1-5KHz (collector)		

Circuit Diagram:

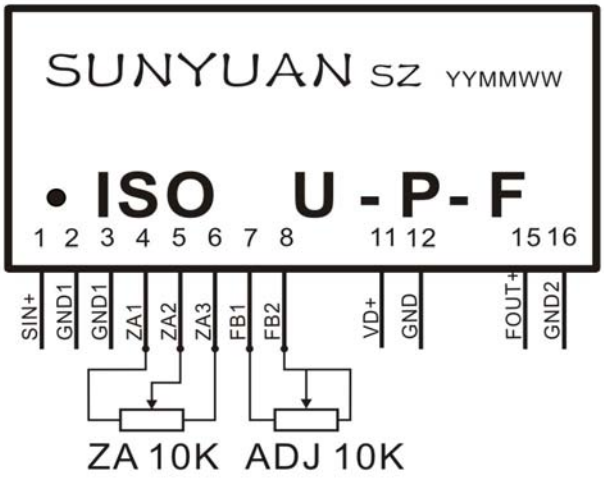


Functional Block Diagram

Typical Connection Circuits:

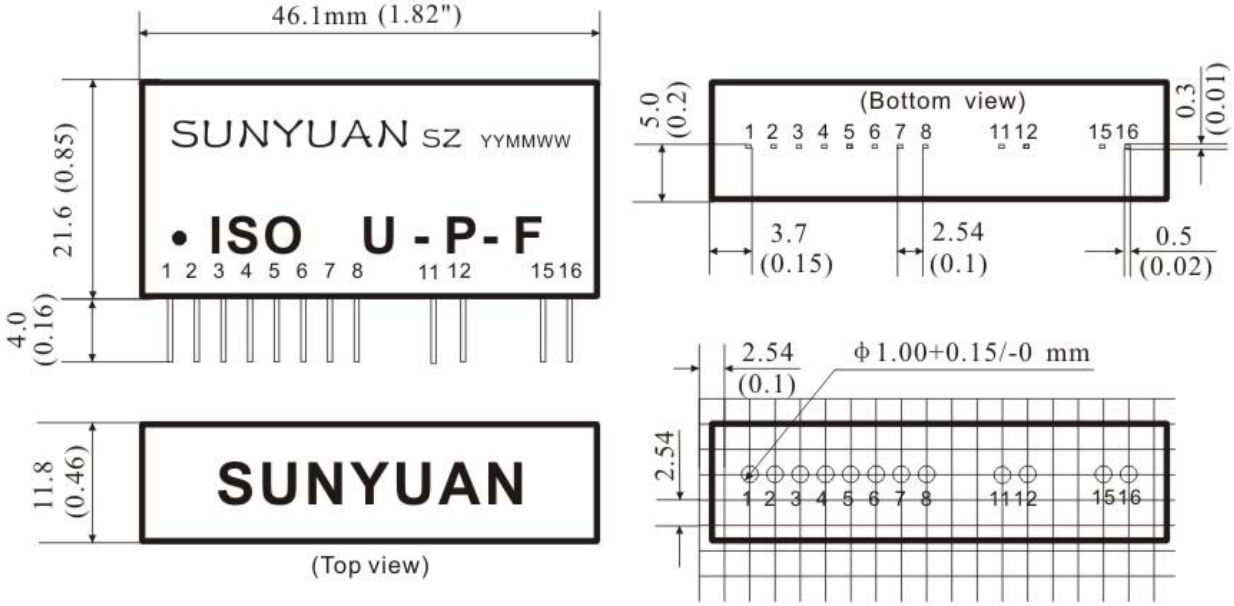
* 5V Voltage Pulse Output	* Open Collector
	

SIP 16Pin Function Description:



Signal input +	Signal input -	Zero adjustment #1 10K	Zero adjustment #2 10K	Zero adjustment #3 10K	Gain adjustment #1 10K	Gain adjustment #2 10K	NC	Input auxiliary power positive	Input auxiliary power GND	NC	Signal output +	Signal output -
SIN+	GND1	ZA1	ZA2	ZA3	FB1	FB2	NC	VD+	GND	NC	Fout+	GND2
1	2~3	4	5	6	7	8	9~10	11	12	13~14	15	16

PCB Installation and Dimension



DC V/I Signal Converter/ Frequency Signal Transducer

Applications:

·DC signal converter to isolated frequency pulse signal
·Accurate digital voltage testing meters
·A/D isolated converter instruments
·Data testing and remote monitor instrument
·Analog signal data acquisition
·Ground interference control

ISO9001:2008

CE RoHS

Features:

·Change the input signal into unit impulse signal
·Efficiency grade: 0.1/0.2
·International standard signal input: 0-5V/0-10V/1-5V, 0-10mA/0-20mA/4-20mA
·Standard signal output： 0-5KHz/0-10KHz /1-5KHz and so on
·Extremely high linearity in whole process（Nonlinearity<2%）
·Signal input/output/ Accessorial power supply

Model Selection:

DIN 1X1 ISO- U(A)□- P□- F□

Input rated voltage（or current）

U1： 0-5V
U2：0-10V
U8：Customized
A1：0-1mA
A2：0-10mA
A3：0-20mA
A4：4-20mA
A8：Customized

Auxiliary Power P

P1： DC24V
P2： DC12V
P3： DC5V
P4： DC15V
P5：220VAC
P8：Customized

Output F

F1：0-5KHz (5V impulse)
F2：0-10KHz (5V impulse)
F3：1-5KHz (5V impulse)
F4：0-5KHz (open collector)
F5：0-10KHz (open collector)
F6：1-5KHz (open collector)
F8：Customized

Example:

Eg1：input：0-5V	Accessorial power supply：24VDC	output：0-5KHz	Model：DIN 1X1 ISO-U1-P1-F1
Eg2：input：0-20mA	Accessorial power supply：5VDC	output：0-10KHz	Model：DIN 1X1 ISO-A3-P3-F2

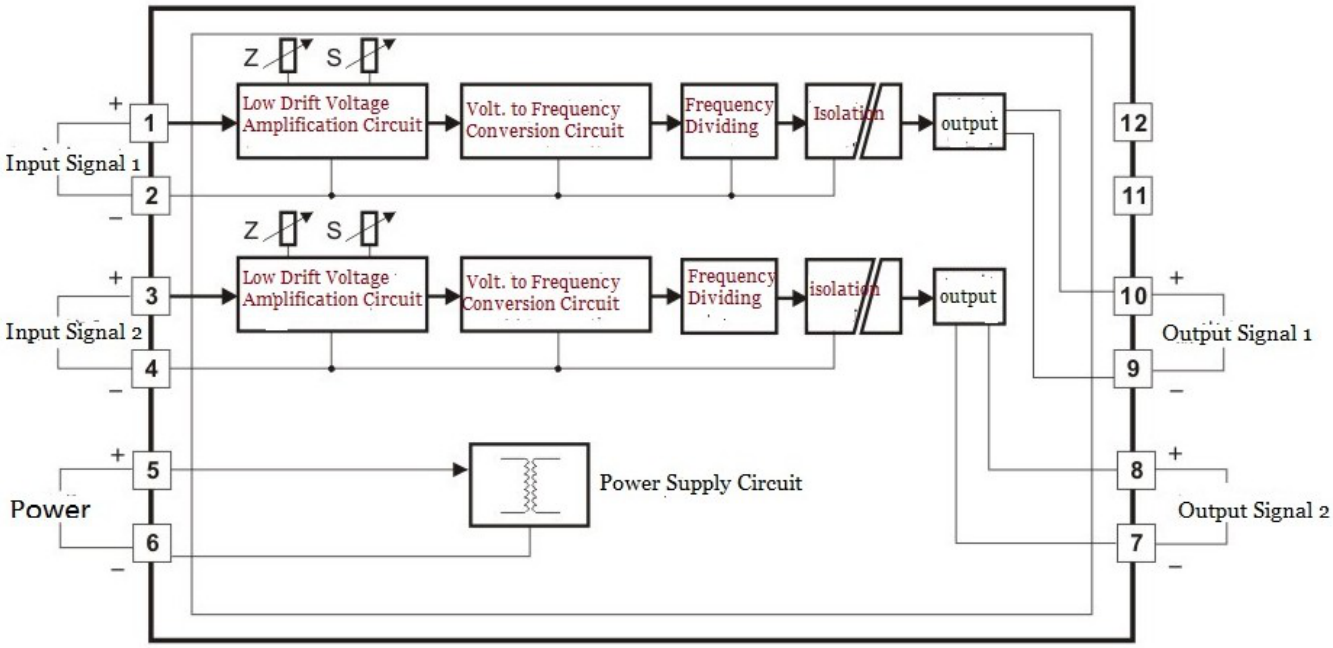
General Parameters:

Efficiency ---------- 0.1%/0.2%	Isolation ---------- Signal input/output / Accessorial power supply
Accessorial power supply --------- DC5V/12V/24V	Insulated resistance ---------- ≥20MΩ
Operating Temperature ---------- -25 ~ +70℃	Comparison endurance ---------- Signal input/output/ Accessorial power supply
Operating humidity ---------- 10 ~ 90% (No condensing)	3KVDC，(50Hz/1min, leak current 1mA)
Storage temperature ---------- -45 ~ +85℃	
Storage humidity ---------- 10 ~ 95% (No condensing)	

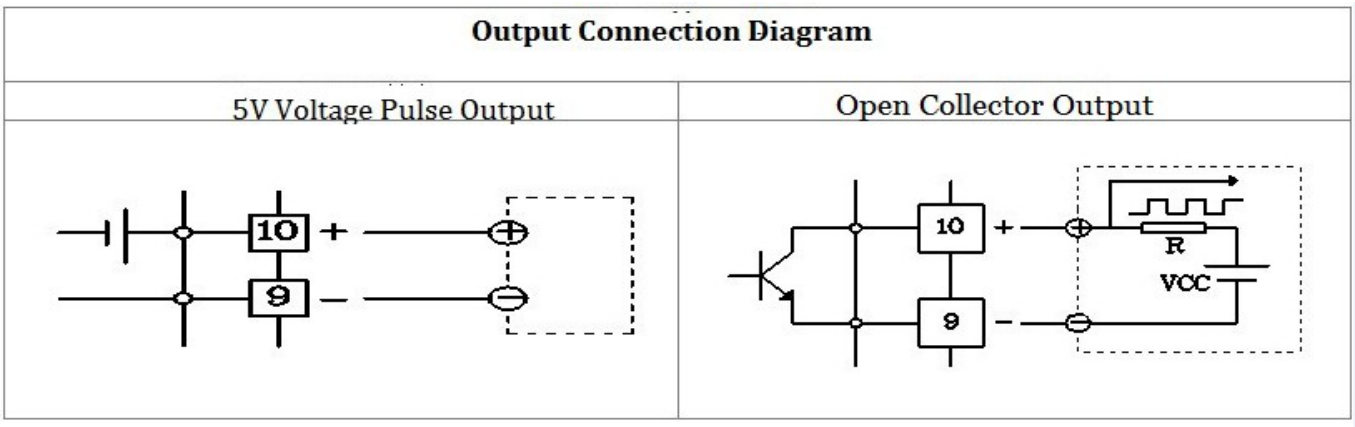
Input Parameter			
Input	**Input impedance**	**Power loss**	**Input over-loaded**
0-5V	> 100KΩ	<1W	1.2 times: Continuous
0-10V			
0-1mA	TYP：250Ω Customer chose		
0-10mA			
0-20mA			
4-20mA			

Output Parameter		
Output	**Output Parameter**	**Response**
F1: 0-5KHz(5V impulse)	High Level;3.0-5.5V Low Level:Below 0.5V Load resistance: > 250Ω	≤50mS
F2: 0-10KHz (5V impulse)		
F3: 1-5KHz(5V impulse)		
F4: 0-5KHz (collector)	DC30V，100mA（loaded）	
F5: 0-10KHz (collector)		
F6:1-5KHz (collector)		

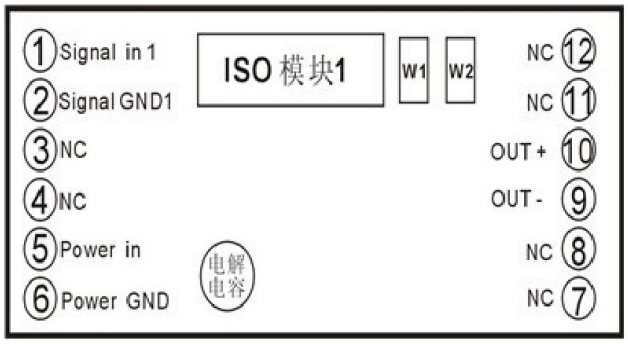
Circuit Diagram:



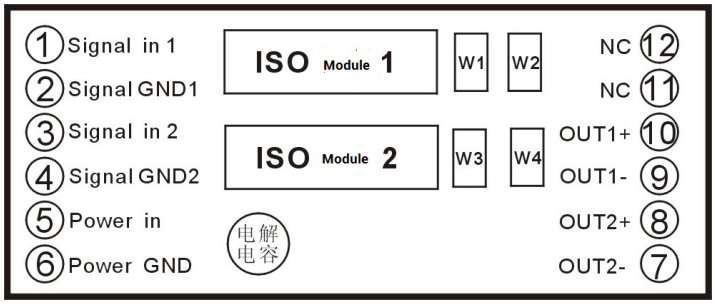
Output Connection Diagram



The Modules with Gain/Zero Adjustment:



W1: the gain adjustment resistance to adjust output precision

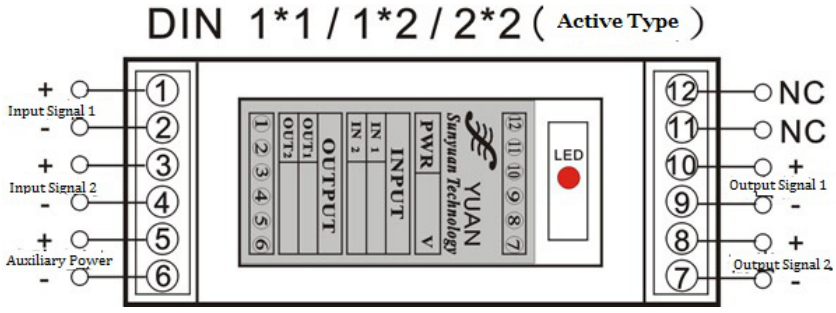


W1: the gain adjustment resistance to adjust output precision
W2: adust Zero precision

DIN □X□ External View and Dimension

Pin	PIN Decription	
1	Signal in 1	Signal Input 1 +
2	Signal GND	Signal Input1-
3	Signal in 2	Signal Input 2 +
4	Signal GND	Signal Input 2 -
5	Power in	Auxiliary Power +
6	Power GND	Auxiliary Power -
7	NC;	Null
8	NC;	Null
9	Out -1	Signal Output 1-
10	Out+1	Signal Output 1+
11	Out -2	Signal Output 2-
12	Out+2	Signal Output 2+

***Brand:** SUNAYUAN SZ



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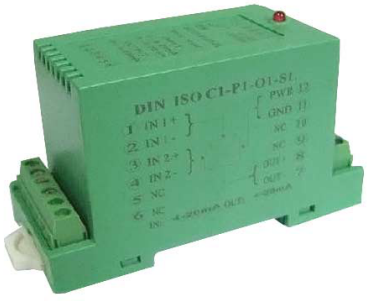
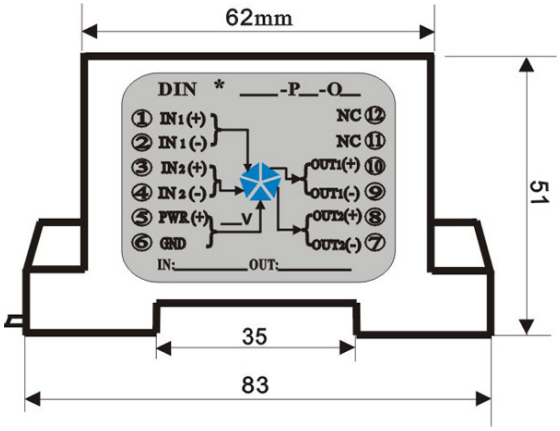
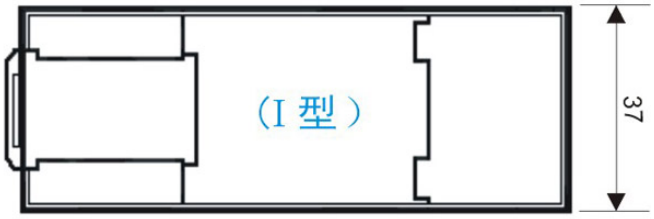


CE RoHS





Unit:mm