

Digital torque meter SISCO-DPM-RTS5D with 3-channel 5 digit LED can real-time display dynamic torque, speed and power. Digital torque meter has functions such as zero tracking, low/high alarm and peak value display.

## I. Specification:

	Model	SISCO-DPM-RTS5D		
Basics	Dimension	160*80*170mm horizontal, hole size 152*76mm		
	Shipping weight	2kg		
	Display	Measuring range of torque: -99999~99999 Nm		
		Display value of torque: 0~99999 Nm		
		Display value of speed: 0~99999 rpm		
		Display value of power: 0~99999 kW		
	Measuring resolution	Meter resolution: 1/1000000, display resolution: 1/120000		
	Measuring speed	25 times/second		
	Display method	3-channel 5 digit LED display		
	Meter power supply	220VAC, 50/60Hz		
	Input signal	Various pulse signal: NPN, PNP, OC gate output signal of		
		sensors, proximity sensors, rotary encoders		
lechnical parameters	Measuring frequency	Input pulse of torque: 5kHz~15kHz		
		Input pulse of speed: 0.3Hz~20kHz		
	Alarm	Three alarm outputs for L/H alarm		
	Analog signal output	2-channel DC 4-20mA output signals (resolution: 1/4000,		
		error: $<$ 0.2%FS, load capacity: $\leq$ 600 $\Omega$ , optical isolation)		
	Communication output	RS485 or RS232 (optical isolation)		
	External power supply	±15VDC or 24VDC (≥300mA, provide power supply for		
		torque sensor)		
	Working environment	Temperature: -10~+70 $^\circ\mathrm{C}$ (14~158 $^\circ\mathrm{F}$ ), humidity: 0~90%RH		
		(no condensation)		

## II. Panel and key description

Torque 8. 8. 8. 8. 8. N.m	Torque Meter
Speed 8. 8. 8. 8. 8. <sup>rpm</sup> Power 8 8 8 8 8 KW	



Name		Description		
	Display 1	Displays the measured value of torque.		
Display		In the parameter setting state, the parameter codes and parameter values are		
		displayed.		
		If the last place decimal point blinks, it means it's the peak display state.		
	Display 2	Displays the measured value of speed.		
		Don't display any value in the parameter setting state.		
	Display 3	Displays the measured value of power.		
		Don't display any value in the parameter setting state.		
Indicator		The alarm state of the torque alarm point and the peak display state.		
	SET key	In the measurement state, press it and hold for more than 2 seconds to enter		
		the setting state.		
		In the setting state, press it once to display the next parameter and save the		
		previous parameter.		
	<b>.</b>	It is invalid in the measurement state.		
Operating key	- key	In the setup state: 1 Recall the original parameter value.2 Move the		
		modification digit.		
	<b>A</b> .	It is invalid in the measurement state.		
	key	Increase the parameter value or change the setting type in the setting state.		
	•	It is invalid in the measurement state.		
	key	Decrease the parameter value or change the setting type in the setting state.		

### **III.** Parameter setting

1. Press and hold the setting key "SET" for more than 2 seconds to enter the setting state, the meter displays the code of the first parameter.

2. "SET" key can select other parameters sequentially.

3. Press  $\checkmark$  key to recall the original setting of the current parameter, the flashing digit is the correction digit.

4. Press 📍	key to move the modified digit, press	*	Key to increase the value, press	Ŧ	key to decrease
the value.					

5. Press "SET" to save the modified parameters and go to the next parameter. If it's the last parameter, press "SET" key will exit the setting state.

6. Repeat step 2~5 can set other parameters.

### **IV.** Parameter description

# <u>sisco</u>

## Digital Torque Meter

Code	Content	Range	Instruction
OA	Password 1	0~99999	No password is required.
OA1	Password 2	0~99999	No password is required.
FLtr	Filter coefficient	0~72	Default: 00006
			When the torque measured value fluctuates greatly increase
			the setting value appropriately. The larger the setting value,
			the slower the display refresh speed.
in-d	The decimal point	0~4	This parameter is only for torque. Set to 1 to retain 1 decimal
	position of the		place, and set to 0 to not retain decimal place.
	torque display		
Lc	Torque range	256~99999	Torque range
	(absolute value)		
Fd	Division value	1~36	Default: 5
	setting		
			This parameter helps display stability. It is defined as: when
			the meter judges that the measurement is stable, it displays
			the actual value, and then the measured value fluctuates less
			than the set value of this parameter, and the display remains
	-	0.10	unchanged.
tr-d	Zero tracking range	0~10	Default: 10
			When the torque measured value is lower than this set value
			and is stable for at least 1 second, the measured value will be
	Desired a sist of	001	automatically cleared to zero.
In-d1	Decimal point of	0.01	This parameter is only for speed. Set to 1 to retain 1 decimal
1 01	Speed	0~10000	place, and set to 0 to not retain decimal.
	speed range	0.10000	set to 3000 means the rotation speed is 0 * 3000 rpm,
			corresponding analog output signal. 4-20mA.
		1~2000	Default: 00060
FULSL	revolution	1 2000	
1_1	Absolute value	0~1	Set to $\Omega$ indicating that the torque is displayed as the positive
	measurement	0 1	and negative torque
	switch setting		Set to 1, indicating that the torque is displayed as an absolute
			value.
ADD	Communication	1~99	Default: 00001
	address		
bsH	Torque range	0~99999	Torque transmitter output range setting.
	corresponding to		Note: 1. When the display value is absolute value, the
	analog signal		transmitter output signal is also an absolute value. When the
			torque is 0, the transmitter output signal is lower limit value.
			2. When the torque is displayed as the positive and negative
			torque, the zero corresponds to the middle point of the
			torque range.



## Digital Torque Meter

Code	Content	Range	Instruction		
ALSd	Lock function of	0~1	Set to 0: The alarm output is not locked.		
	alarm		Set to 1: The alarm output is locked. After alarm, it can only		
			be cancelled by the "ZERO" key on the panel.		
AL1	Alarm 1 setting	-19999~99999	AL1 indicator		
	value				
AL1F	Alarm mode of	0~3	Default: 0		
	alarm 1				
			0: Upper limit alarm.		
			1: Lower limit alarm.		
			2: Absolute value upper limit alarm (Alarm when the absolute		
			value of the measured value is greater than the set value).		
			3: Absolute value lower limit alarm (Alarm when the absolute		
			value of the measured value is lower than the set value).		
			Note: When set to absolute value alarm mode, parameter AL1		
			should be set to a positive value.		
	Return difference	0~20000	Difference value between exiting alarm state and entering		
AL1HC	value of alarm 1		alarm state.		
			Set to 0 means no return difference function.		
AL1YS	Alarm delay setting	0~20.0s	When the displayed value alarms, the relay will output after		
	of alarm 1		the set delay time. This delay time will also work when exiting		
			the alarm. When set to 0.0, there is no alarm delay function.		
			This setting is only for alarm 1.		
AL2	Alarm 2 setting	-19999~99999	AL2 indicator		
	value				
AL2F	Alarm mode of	0~1	Default: 0		
	alarm 2		0: Upper limit alarm.		
			1: Lower limit alarm.		
			2: Absolute value upper limit alarm (Alarm when the absolute		
			value of the measured value is greater than the set value).		
			3: Absolute value lower limit alarm (Alarm when the absolute		
			value of the measured value is lower than the set value).		
			Note: When set to absolute value alarm mode, parameter AL2		
			should be set to a positive value.		
	Return difference	0~20000	Difference value between exiting alarm state and entering		
AL2HC	value of alarm 2		alarm state.		
			Set to 0 means no return difference function.		
AL2YS	Alarm delay setting	0~20.0s	When the displayed value alarms, the relay will output after		
	of alarm 2		the set delay time. This delay time will also work when exiting		
			the alarm. When set to 0.0, there is no alarm delay function.		
			This setting is only for alarm 2.		
HZ-L	Torque frequency	0~99999	Default: 05000Hz		
	lower limit		Frequency value corresponding to negative torque range.		



## **Digital Torque Meter**

Code	Content	Range	Instruction
HZ-H	Torque frequency	0~99999	Default: 15000Hz
	higher limit		Frequency value corresponding to positive torque range.
HZ-0	Torque frequency	0~99999	Default: 10000
	zero point		Frequency value corresponding to torque zero.
LO-HZ	Frequency value	0~99999	The frequency value when the panel is cleared by ZERO key.
	corresponding to		When press the ZERO key, the current frequency value is
	zero clearing		automatically stored in this parameter. By viewing this
			parameter, you can know the actual zero frequency value of
			the torque sensor.

## V. Function operation

1. Zero operation of torque value: Press and hold the "ZERO" key until the display value is zero. This function is used to clear the zero drift of the torque sensor to achieve the best detection effect.

2. Torque peak value display: Press the "PEAK" key, the peak torque is shown in display 1. When the peak value is displayed, the last digit blinks. Press the "PEAK" key again to return the current torque value measurement state. After the torque zero operation is performed, or the power is turned off, the peak value is returned to zero.

## VI. Wiring diagram:

