DMI815 - Digital Display Inclinometer

General Description

DMI815 is a digital display inclinometer for various industry angle controlling and measuring. DMI815 is a single axis 90deg measurement, resolution 0.001 °、the highest accuracy <0.005 degree full-scale、fast response, stable data, products specially designed for the sides and bottom with magnetic adsorption installation, both sides of the benchmark can be measured and using normally,very convenient to use, In addition, supporting the selection of DMI815 (SMI815) with the use of separate measurement, used in combination with the Division HCA series tilt sensor, the transmission mode wireless or wired optional, wireless using one-to-one band transmission, transmission straight line distance> 10m, the cable transmission standard 1 meter (can be customized long distance), DMI815 series has strong scalability, convenient & practical application and industrial reliability, has absolute cost advantage and has an absolute competitive advantage in the international market !

Features:

●Best accuracy：<0.003° ●Repeatability：0.003° ●Angle resolution：0.001°

●Maximum measuring range：±90° ●User can set the alarm value by himself ● Data store function

●Absolute/Relative measurement can switch ●Both sides and bottom can measure

●Working Temperature : -10°～ +70℃ ●Auto temperature drift compensation

●User can calibrate ZERO by himself ●IP54 protection class

●°/mm/m Dual units switch function ● Filter frequency optional

●Three kinds of measurement mode selectable (radian, angle, mm)

Application :

●Building construction ●Automobile four-wheel testing

●Road slope ●Machinery installation ●Piping installation ●Industrial platform

●Turntable testing ●Pan unit angle detection ●Production jig ●Medical instruments

Technical Data

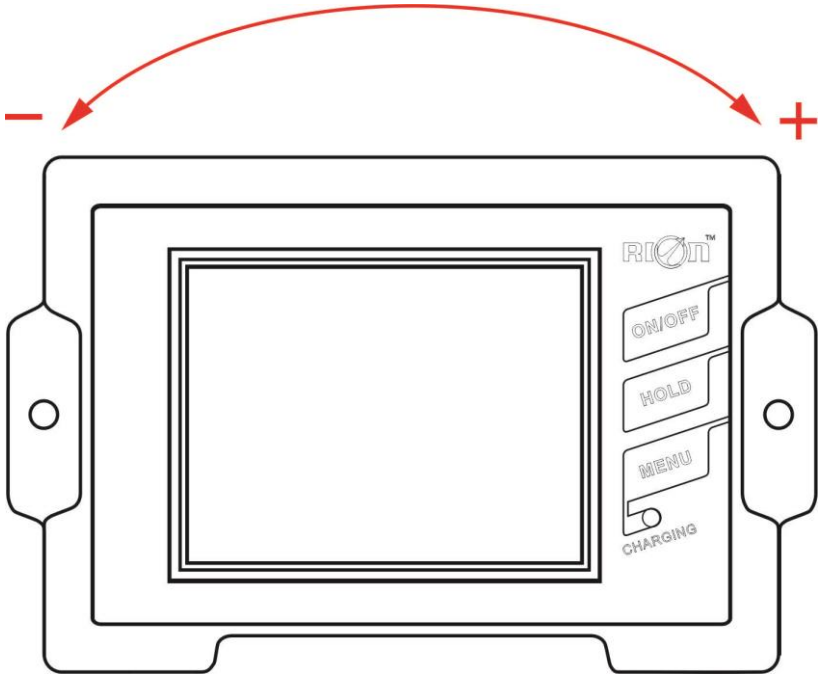
Parameter	DMI815-15	DMI815-30	Unit
Angle Measuring range	DMI815:±15 ° ;	DMI815:±30 ° ;	°
MM measuring range	267	577	mm
Meausring axis	Single axis	Single axis	
The highest meausring accuracy	<0.005 （Full measuring range）	<0.01 （Full measuring range）	°
Angle Measuring resolution	0.001	0.001	°
MM measuring accuracy	0.1	0.2	mm
Three measurement mode selectable	radian, angle, mm measuring can be selected		
MM measuring res	0.02		mm
LCD	64 true colors night vision display screen		
LCD visible area size	L57.6*W43.2		mm
Working temperature	-10°～ +70℃		°/℃
Working humidity	85		%RH
Equipped with PC software	VC software		
Data output signal	RS485/RS232		
Connect plug in	Standard 5Pin USB connector		
Shock resistance	10g@11ms、3Times/Axis(half sinusoid)		g
Shock impact	10grms、10～100Hz		g
Weight	300		g
Waterproof grade	IP54		
Material	Metal		
Size	L117*W75*H27.1mm		mm

Ordering information :

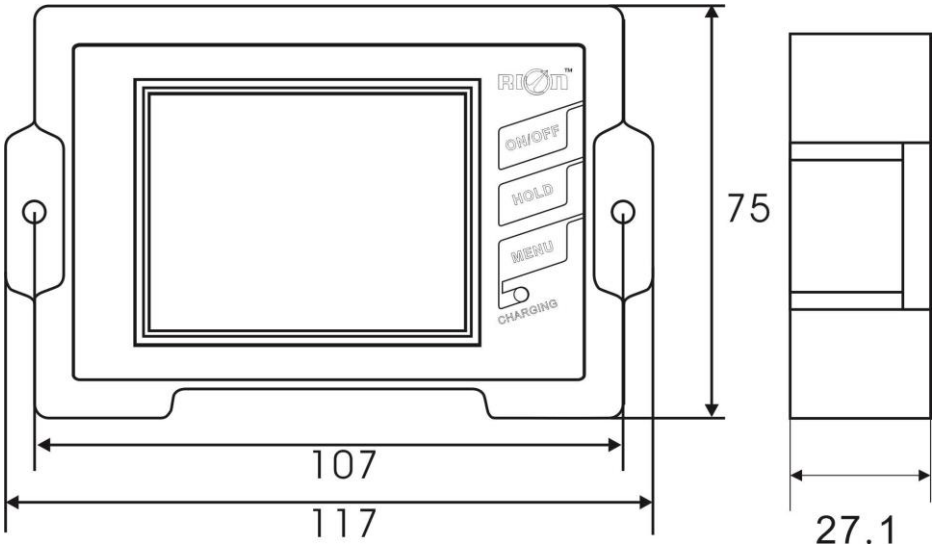
Item No.	Desc.
DMI815-15	Standard dual-axis digital display inclinometer/ ±15°;
DMI815-30	Standard dual-axis digital display inclinometer/ ;±30°;

E.g:DMI815-15 is standard single-axis digital display inclinometer with measuring range ±15°

Measuring direction



Product Dimension diagram



Product appearance size：L117*W75*H27.1mm

Product Functions:

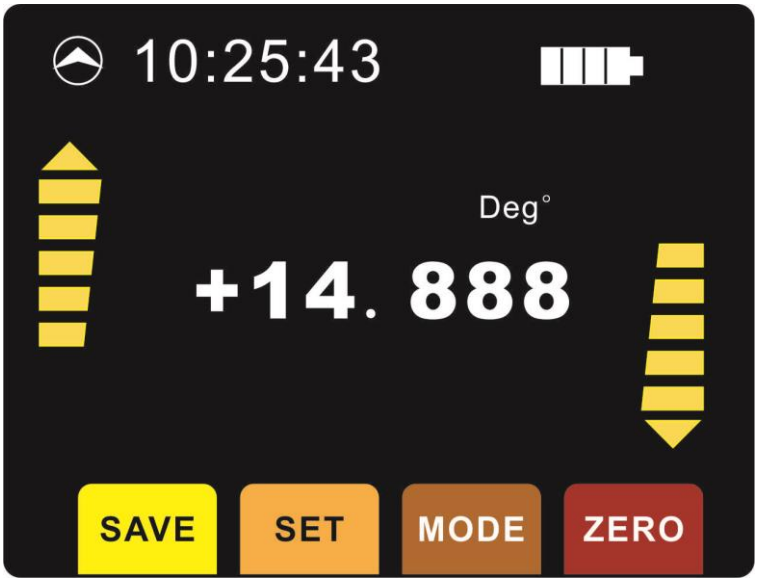
ON/OFF： Press for 2seconds to power on or off ;
HOLD： This key to lock the current data, convenient customer records;
MENU： Press MENU menu disappears, then re-press appears.。

Functional menu instructions :

1.ON/OFF press 3 seconds or so, when heard “beep...”Let go, startup/shutdown .
2. Press “HOLD” button to lock , re-press to unlock , Upper right corner of the monitor icon display.
3. Press MENU menu disappears, then re-press appears.。
4 Press the “ MENU” and “HOLD” keys at same time to enter the touch screen calibration.

4.1 Click “OK” enter into next step ,click “EXIT” to Exit touchscreen calibration.

4.2 Click the red dot with a small pen to move the red finish four points automatically exit calibration.



SAVE - Click the SAVE button to enter the touch screen save option

A. DELETE ALL DATA

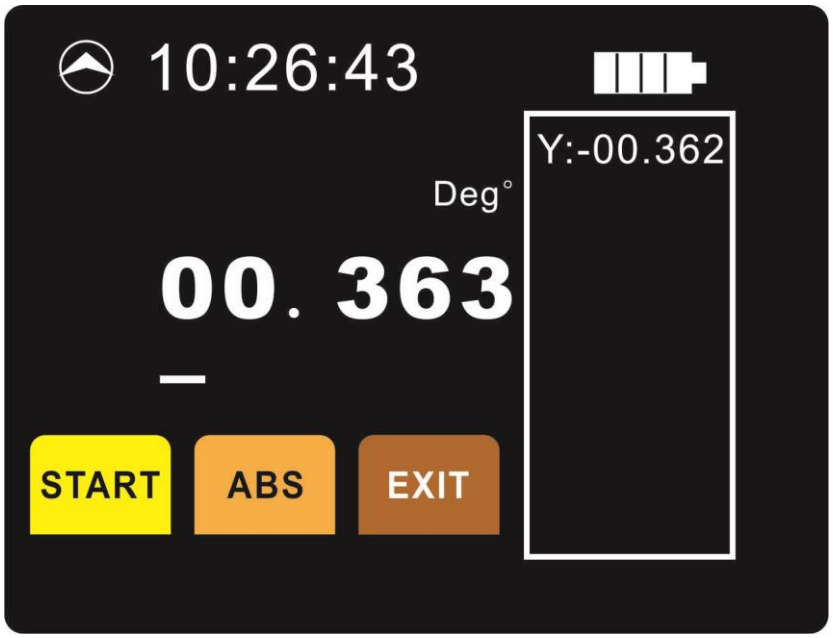
B. SAVE THE SINGLE POINT

C. SAVE MULTIPLE POINT（Saved frequency selectable 1，5，10，20）

D. Click “OK “to choose “success”

E. EXIT Give up selection to keep the original

Select “save the single point” to enter into interface



Save then click START ,Saved the related data in SD card，and display at the right corner of the interface ， Right corner of the six sets of data can be displayed, and then refresh ABS/ZERO Switch keys

EIXT: Exit saving function

SET

Click the SET button to enter the setup interface six button options and features:

A. ALARM : Angle alarm value setting

B. CALI. : Calibration setting

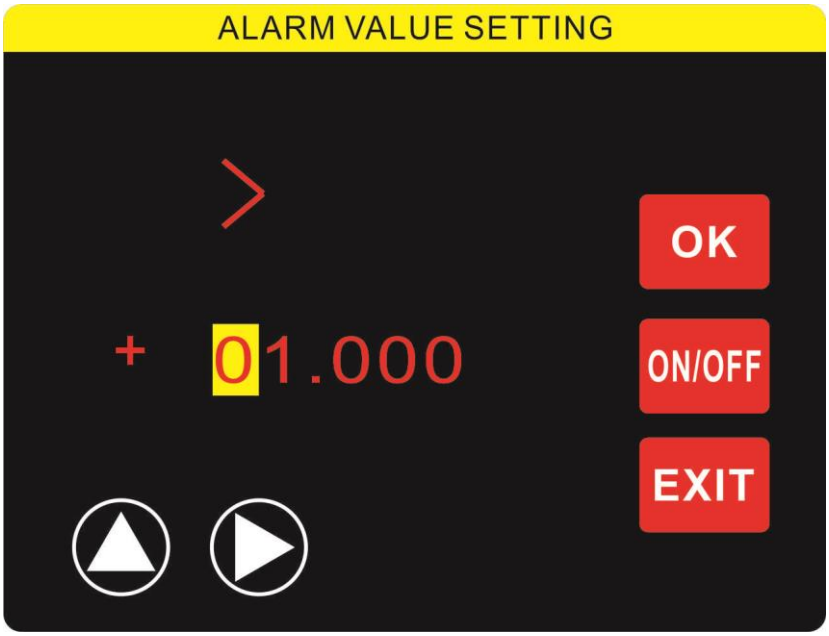
C. FILTER : Filter frequency setting

D. DATE : Date settting

E. FAC. RESET : Factory default setting

F. EXIT : Exit the setting interface

A.ALARM



1. Click ON / OFF and open the angle alarm setting, display numbers, closed setting then shows "------."
2. Click on the X or Y axis data point select the appropriate axis angle setting.
3. Click the up: Changing the corresponding bits of data and symbols.
Left: Change the corresponding bit of the direction keys.
Angle symbol is +: When the angle is greater than the corresponding alarm
-: When the angle is less than the corresponding alarm
+ / -: Outside this range alarm

For example:
Set X: +03.00 means when the X axis angle +3.3, is greater than 3 degrees then alarm;
Set Y: -04.00 means when the Y axis angel -4.6 ,is less than -4 degrees then alarm;
Set Y: + / -05.00 angle when the Y axis angle -6, exceed -5 to +5 degrees then alarm

4. Click “OK “ to save the setting angle, then to take effect
5. EXIT: Exit set the angle saving

B. CALI

Click” OK” then to operate according to related action

C.FILTER

Default 20HZ
Select 1HZ : Output frequence after filting
OK : Select success
EXIT : Exit selection

D.DATE

Setting data & time to display the correct time of saved data

To the left: choose the time (date) (month) (year), the location of the hours,minutes and seconds, recycled

The up button: adding the corresponding value

The down keys: reduce the corresponding numerical values

OK: save Settings

EXIT: quit Settings date interface, no save

E. FAC.RESET

Restore the factory Settings

The parameters of the recovery has alarm value, filtering frequency,calibration angle

Unit mode selection

MODE press each time to display unit mode change DEG, degree,minutes and seconds, mm/m switching cycles

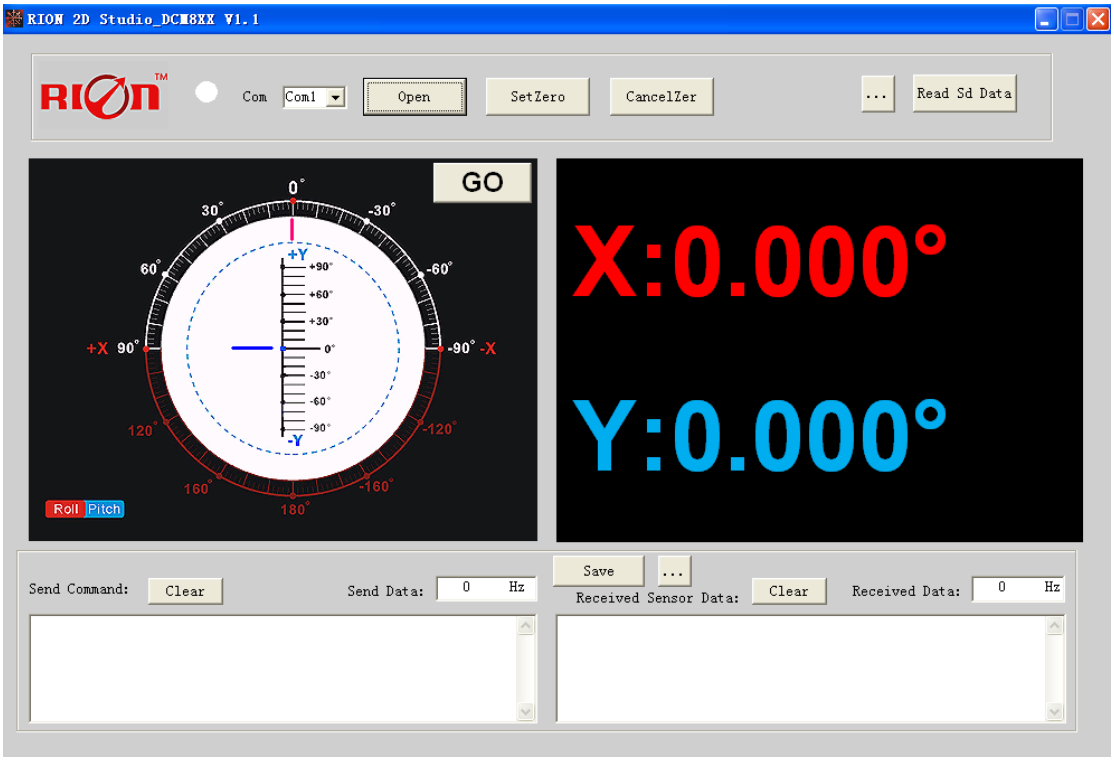
ZERO/ABS : Absolute Relative

ZERO: click to set the current angle to ZERO

ABS: click on the switch to absolute zero

When crashing to restart with needle to press the holes under the lamp to reset

Upload the SD card to access the data using the software to store data.



Products maintenance :

1. The instrument reliability and can be used in the vibration environment, please don't high-altitude fall the instrument to avoid cause permanent damage.
2. If found instrument damage please don't disassemble it by yourself, please contact us at first for professional guidance , such as personal removed , subject to manufacturer shall refuse to repair.

Warning ：

1.This product has a high precision sensor and information processing circuit, it is forbidden to drop impact or to tear open outfit, otherwise the consequence is proud.

2. Don't press the multiple keys at the same time, it is easy to affect the service life of the Product.

3.This product should be placed in a safe place where Children can not touch.

More information please visit our website: www.pm-instrumentation.com