



7130
Digital Linear Gages
Manual



PRODUCT INTRODUCTION

Caution: Prevent liquid from getting into indicator to damage electronics

Dust/waterproof IP43, resolution 0.1μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-10	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-10L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-11	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-11L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	
7130-12	0-12.5mm	0.5μm	1μm	horizontal	RS485(VCC+5V~12V)	
7130-12L	0-12.5mm	0.5μm	1μm	vertical	RS485(VCC+5V~12V)	
7130-13	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-13L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-14	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-14L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	

Dust/waterproof IP43, resolution 0.5μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-20	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-20L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-21	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-21L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	
7130-22	0-12.5mm	1.5μm	3μm	horizontal	RS485(VCC+5V~12V)	
7130-22L	0-12.5mm	1.5μm	3μm	vertical	RS485(VCC+5V~12V)	
7130-23	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-23L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-24	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-24L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	

Dust/waterproof IP66, resolution 0.1μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-30	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-30L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-31	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-31L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	
7130-32	0-12.5mm	0.5μm	1μm	horizontal	RS485(VCC+5V~12V)	
7130-32L	0-12.5mm	0.5μm	1μm	vertical	RS485(VCC+5V~12V)	
7130-33	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-33L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-34	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-34L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	

Dust/waterproof IP66, resolution 0.5μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-40	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-40L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-41	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-41L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	
7130-42	0-12.5mm	1.5μm	3μm	horizontal	RS485(VCC+5V~12V)	
7130-42L	0-12.5mm	1.5μm	3μm	vertical	RS485(VCC+5V~12V)	
7130-43	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-43L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-44	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-44L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	



7130-10



7130-10L

1. Absolute encoder, the original data remains after power off.
Digital signal output, amplifier is not required.
Dust/waterproof: IP43/IP66
Cable length: 3m (can be customized)

2. Signal output mode:
Communication mode: RS-232C (232 level/TTL level optional)/RS485 optional
Baud rate: 2400-115200bps optional (factory setting: 9600bps)
Check digit: None
Data bits: 8
Stop bit: 1
Output code: ASC II
Receive command code: hexadecimal single byte (for example: send 0x99 sensor to zero)

3. Connection method:
PC: a dedicated data cable is required (note: the driver needs to be installed on the PC)
PLC: M8 dedicated data cable is required
Remote display terminal: a dedicated data cable is required

4. Main commands:
Zero setting: 0x99
Data transmission (passive or active): 0xdd (active transmission) / 0xde (passive transmission)
Address setting: no need for actual communication, customization
For example: the host computer sends a hexadecimal number: 0x10 command.
The dial indicator or sensor will send a 9-digit data string after receiving it. If the current dial indicator shows -1.2345mm, send as acs code: 0x2D, 0x30, 0x31, 0x2E, 0x32, 0x33, 0x34, 0x35, 0x0A. The last bit is the end bit
If there is a set address (usually in 485 networking mode), the address is 0x69 (the address cannot be changed, it is directly engraved on the outside of the meter body). Sending 0x10 will not respond, only the host computer will send: 0x69, the dial indicator will send address + data, such as: 69-1.2345mm, send as acs code: 0x36, 0x39, 0x2D, 0x30, 0x31, 0x2E, 0x32, 0x33, 0x34, 0x35, 0x0A.

5. Pin definition (RS485 protocol):



Pin color	Symbol	Function
Red	VCC	Power(+5~12v)
Green	A+	Data
White	B-	Data
Black	GND	GND