

Crawler for Pipe Welds

LPS-07  
LPS-08



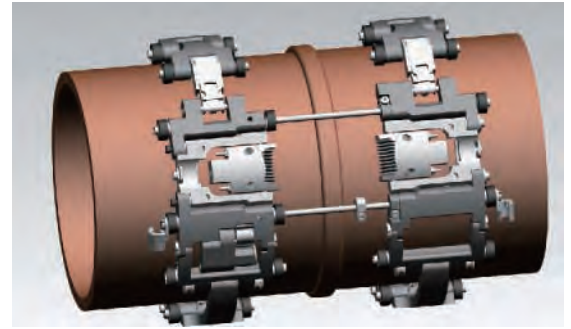
**SIUI**



# LPS-07/LPS-08

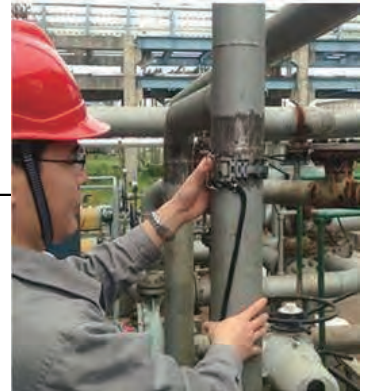
The Phased Array low profile crawler LPS-07 and LPS-08 are compatible with Phased Array ultrasonic flaw detector, which is used to perform circumferential weld inspection on pipes (OD:100mm-300mm).

- Compact, lightweight, portable, waterproof and rust-free.
- Probes and wedges can be quickly and easily changed.
- Support up to two phased array probes to cover the whole welds at one time.
- Covers standard pipes with outside diameters ranging from 100-300mm (3.94-11.81 inch).
- Can be operated within 15mm clearance, perfect for hard-to-reach area inspection.
- Encoder precision: 27.2 step/mm
- The probe spacing can be adjusted in the range of 0-55 mm.
- Crawler can provide stable and constant pressure around the pipe full circumference.
- Urethane wheels help the crawler have smooth radial movement along the pipe and reduce axial drift.
- Positive inspection and reverse inspection with high reproducibility and good coupling.
- With its simple buckle design, just easily buckle up and unbuckle the links for different pipe diameters (No need to disassemble the whole scanner).
- Two inspection methods: one-side inspection and dual-side inspection.



## Standard Accessories

	LPS-07	LPS-08
<b>System</b>	<b>Phased Array Flaw Detector SynScan or SUPOR</b>	
<b>Scanning Link</b>	<b>Scanning link LPS-07-EN (1 pc)</b> a) Suitable for pipe with OD from 100-300mm (3.94-11.81 inch) b) Weight (with all links):0.6kg	
	×	<b>Scanning link LPS-07-SP (1 pc)</b> a) With LPS-07-EN to achieve dual-side inspection b) Suitable for pipe with OD from 100-300mm (3.94-11.81 inch) c) Weight (with all links):0.6kg
<b>Encoder Wheel</b>	<b>Encoder Wheel (1 pc)</b> a) Precision: 27.2 step/mm b) IP: IP68 c) Integrated with connecting wire, with 14-core connector d) Weight: 0.08kg	
<b>Pipe Divider</b>	<b>Pipe Divider (1 pc)</b> a) Specification: Main water pipe: 4×2.5mm (OD×ID) Distributed water pipe: 2×1.2mm (OD×ID) b) Support up to 2 probes coupling	
<b>Encoder Cable</b>	Fixed with encoder	



## Optional Accessories

	LPS-07	LPS-08
<b>Probes</b>	<b>Low-profile PA probe (1 pc)</b>	<b>Low-profile PA probe (2 pcs)</b>
<b>Wedges</b>	<b>Phased Array wedges (5 pcs)</b>	<b>Phased Array wedges (10 pcs)</b>
<b>Y Splitter</b>	×	<b>Y Splitter for two phased array probes to work simultaneously.</b>
<b>Manual Irrigation Device</b>	<b>Manual Irrigation Device (1 pc)</b> a) Manually pressurized, with adjustable flow valve b) Capacity: 5L c) With tube: 4×2.5mm (OD×ID), 5000mm length d) Weight: 1.5kg	

# Crawler for Small Pipe Welds

## Low-profile Phased Array Probe

Probe Model	Frequency	Elements No.	Pitch	Elevation	Elevation Curvature Radius	Corresponding Wedge
	MHz		mm	mm	mm	
5.OSL16-0.5-10-R35E	5	16	0.5	10	35	8R(35)60S4-I-AOD-XX
7.5SL16-0.5-10-R35E	7.5	16	0.5	10	35	8R(35)60S4-I-AOD-XX
10.OSL16-0.5-10-R35E	10	16	0.5	10	35	8R(35)60S4-I-AOD-XX

## Phased Array Wedge

Wedge Model	Description	L	W	H	AOD		Pipe Min. OD		Pipe Min. OD	
		mm	mm	mm	in.	mm	in.	mm	In.	mm
8R(35)60S4-I-AOD-140	35° -70° shear wave angle block	18	22	12.4	5.709	145	3.858	98	5.591	142
8R(35)60S4-I-AOD-195				12.2	8.071	205	5.433	138	7.756	197
8R(35)60S4-I-AOD-250				12.1	10.236	260	7.598	193	9.921	252
8R(35)60S4-I-AOD-270				12.1	11.221	285	9.764	248	10.906	277
8R(35)60S4-I-AOD-300				12.1	12.205	310	10.748	273	11.890	302
8R(35)60S4-I-AOD-300				12.1	12.205	310	10.748	273	11.890	302

● Note: SIUI low-profile probes and wedges are compatible with Cobra from Olympus and Circ-it from Jireh.

## Technical Specification

Basic Parameters		
	LPS-07	LPS-08
Dimension	Height: 15mm Width: 68mm Max. Length (Suitable for 300mm pipe):946.9mm	Height: 15mm Min. Width(Wedge Front Distance:0mm): 136mm Max. Width (Wedge Front Distance:55mm): 191mm Max. Length (Suitable for 114.3mm pipe): 946.9mm Distance between two wedges front: 0-55mm
Weight	0.7kg	1.3kg
Packing Dimension(W×H×D)	440×340×190(mm)	
Scan Method	Manual, single axis scanning	
Encoder Precision	27.2 step/mm	
Encoder IP Code	IP68	
Suitable Tested Work Piece (Pipe)	OD: 100-300mm(3.94-11.81 inch), pipe min. clearance: 15mm	
Working Temperature	0°C~+40°C	
Working Relative Humidity	30%~85%	
Working Atmospheric Pressure	700hPa~1060hPa	

# SIUI

Shantou Institute of Ultrasonic Instruments Co., Ltd.

Add: #77, Jinsha Road, Shantou 515041, Guangdong, China

Tel: +86-754-88250150 Fax: +86-754-88251499

E-mail: siui@siui.com Website: http://www.siui.com