## PA and TOFD Chain Crawler CPS

## CPS-01



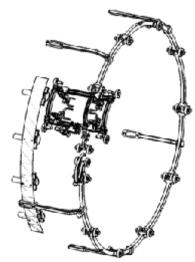


- The CPS-01 is designed to work with SyncScan 2 to perform circumferential weld inspection on long-distance pipeline(OD 1000-1300mm).
- Dual-side phased array inspection and PAUT+TOFD inspection for selection.

### **Superior Features**

- Adaptable to welds of long-distance oil and gas pipeline with thickness 12mm-40mm.
- Chain plus magnetic guide design, 4 probes (2 PA probes and 2 TOFD probes) can be driven simultaneously for testing, single-side and double-side scanning of welds.
- Crawler chain links contact pipeline through high elastic rubber wheels, so as to achieve stable smooth probe moving and improve scanning stability.
- Manual or automatic water irrigation device, maintaining uniform water output and improving coupling stability.





#### Automatic module AUS-01

The AUS-01 is designed to work with crawler CPS-01 to perform automatic scanning on pipeline.

- Safety: Emergency stop switch and battery indicator.
- Easy to use: It is operated by simple button remote control.
- Variable speeds: 7 different scan speeds from 1m/min~3.5m/min.
- Ingress Protection Rating: IP67.

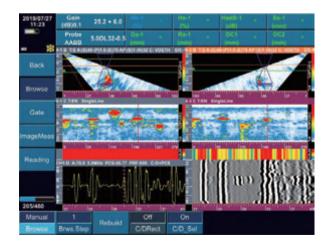


## **On-site Application**



Crawler CPS-01 for long-distance oil and gas pipeline.

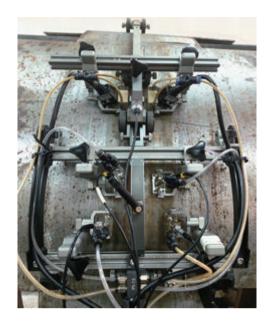




Crawler CPS-01 with AUS-01 for automatic scanning.

Test Result.

# CPS-02

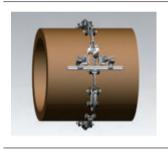


### **Superior Features**

- CPS-02 is designed to work with SyncScan 2 to perform circumferential weld inspection on medium and big diameter pipes(OD 100-1000mm).
- Support up to six probes, achieving PAUT+TOFD and dual-side inspection on big pipes.
- Three types of chain links, flexible buckle design, enabling the crawler have better coupling stability.
- High-strength aluminum alloy material, strong and lightweight.

#### **CPS-02 Series**

#### CPS-02 (Phased Array)





Work with 2 PA probes for PA testing on pipe with diameter large than 100mm.

CPS-02A (Phased Array +2-channel TOFD)





Work with 2/4 PA probes and 2 pairs of TOFD probes for PA and TOFD testing on pipe with diameter large than 100mm.

CPS-02B (Phased Array +1-channel TOFD)





Work with 2 PA probes and 1 pair of TOFD probes for PA and TOFD testing on pipe with diameter large than 300mm.

## **On-site Application**

• With its flexible buckle design, just easily buckle up and unbuckle the links for different pipe diameters.

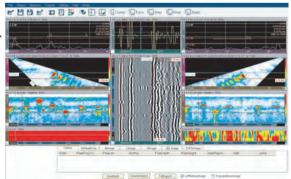




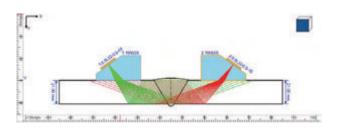
## Data Analysis Software

• SuporUp, can analyze and measure acquired PA and TOFD data.

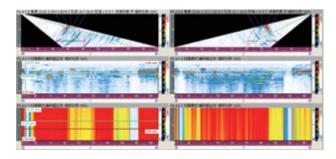
Rich management, measurement and analysis functions in the software are available for data playback of A, B, C, D scans and TOFD data, digital gain adjustment, imaging mode switch and multi-gate measurement, etc.



Based on the measured results, a test report is generated automatically by one-press.



Beam Coverage Simulation



Coupling Monitoring

#### **Technical Parameters**

#### • Crawler CPS-01

Item	Description	
Weight	10.5kg	
Dimension(W×H×D)	30×10×445mm	
Probe Holding Capacity	PA Probe(2 pcs) TOFD Probe(1 pair)	
Scan Method	Manual/ Automatic(with AUS-01)	
Encoder Connector Type	4-core	
Encoder Precision	0.12mm/steps	
Encoder IP Code	IP68	
Suitable Tested Work Piece	Pipe(Outside Diameter)	
	1000~1300mm	
Working Condition (Temperature)	-20℃~+45℃	

#### Crawler CPS-02

Item	Description			
Series	CPS-02	CPS-02A	CPS-02B	
Weight	8kg	10.5kg	9.5kg	
Dimension(W×H×D)	30×10×345mm	30×13.5×375mm	30×13.5×350mm	
Probe Holding	PA Probe(2 pcs)	PA Probe(4 pcs)	PA Probe(2 pcs)	
Capacity	1711100c(2 pcs)	TOFD Probe(2 pairs)	TOFD Probe(1 pair)	
Suitable Tested Work Piece	Pipe(Outside Diameter)			
	100~1000mm	100~1000mm	300~1000mm	
Scan Method	Manual			
Encoder	4-core			
Connector Type	4-0016			
Encoder Precision	0.12mm/steps			
Encoder IP Code	IP68			
Working Condition (Temperature)	-20℃~+45℃			

Note: SIUI can provide Crawler CPS-01/02 with different connectors compatible with PA/TOFD equipments from other manufacturers.

## **Technical Parameters**

Optional Accessories				
Manual Irrigation Device	IH-05 (Capacity: 5L)			
Auto Irrigation Device	IA-02 (Capacity: 18L)			



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