



FarmScan® L60 Series Handheld Ultrasound Scanner Systems

FarmScan® L60 Rectal Linear
I-Scan® V2 Ultrasound goggles

Technical Specification

Applicable L Series Models:	FarmScan® L60 Rectal Linear
	FarmScan® L60 Rectal Curve
	FarmScan® L60 Convex Pig-sheep-goat Ultrasound
System Overview	

Standard Features:	<ul style="list-style-type: none"> • Net weight: 600g • 5.8 inch TFT LCD • Easy-to-use GUI menu • Low power consumption • USB 2.0 For real-time picture uploading to PC • Full digital beamforming technology • Probe automatic identification • Gama correction, Color encode, Image Smoothen
Application scenarios:	<ul style="list-style-type: none"> • Applicable to Dairy Cows, Beef Cows, Feedlot, Sheep, Pigs and small animals body scans, for example, Abdomen, Reproduction, Gynecology, Cardiology, Small Parts <p>FarmScan® L60 Rectal Linear are preferred for use in large animals and for echocardiography of horses. Provides Doppler function- heart rate. Excellent choice for Vet echocardiography.</p>
Imaging Modes:	B, M, 2B, B/M, 4B
Gray scale levels:	256
Monitor:	<ul style="list-style-type: none"> • 5.8" WVGA LCD monitor, wide viewing angle • Resolution: 640*380 • Brightness Adjustable
Image flip	Up/down, left/right
Transducer Type:	Linear Array, Rectal Linear Convex (optional)
Transducer frequency:	Array 2.0-8.0MHz
Transducer connector:	one active transducer connector, unique micro connector Adjustable (3 point each probe) Adjustable
Probe Frequency:	
Frame correlation:	
Scanning depth:	≥220mm, multi-steps
Dynamic imaging technologies:	Gama correction Color encode Image Smoothen



Function:	
Language	Software: English User Manual: English
Zoom	Real time zoom Freeze zoom
Image Storage	Overall Gain, Near-field Gain, Far-field
Cine loop	Gain ≥64 frames; non-volatile ≥400 frames

System Dimension:	Height: 120mm Width: 250 mm Depth:40mm
Weight:	0.6kg w.o. transducer
Physical channels	16
	Programmable device (FPGA) and surface mounted technology (SMT) make this device compact and light in weight.
Transducer element	96/128
Power:	System operates via AC power(Power supply) & battery
AC Adapter:	<ul style="list-style-type: none"> • Voltage: 100-240VAC • Frequency: 50/60 Hz • Currency: 5A • Output: 12V
	<ul style="list-style-type: none"> • Lithium-Ion, 11.1V , 2600mAH
	<ul style="list-style-type: none"> • Charge to Full: 6 hours • Max Duration:4.5 hours realtime scan *
Battery: (optional)	

* vary on the configuration and different working condition, for more details to contact the sales.

Operating Environment:	<ul style="list-style-type: none"> • Temperature: 0-40 °C • Humidity: 30%-85% (non-condensing) • Pressure: 700hPa-1060hPa
	<ul style="list-style-type: none"> • Temperature: -20-55 °C
	<ul style="list-style-type: none"> • Humidity: 30%-95%(non-condensing) • Pressure: 700hPa-1060hPa
Storage and Transport:	

User Interface

Control Panel:	Easy operation
Four display modes:	B, B+B, B+M, M; Can realize image real time display, frozen, zoom; up and down flip, left and right flip, save, load, capacity cine loop; Hospital, Name, Age, Sex annotation; measure Distance, circumference, area, volume, heart rate, GA,FW,EDD; Image gray scale 256 levels.
	<ul style="list-style-type: none"> • Hard boot-up in 2s • Power off in 1s
Boot-up and Power off:	
Comment:	Date&time, name, sex, age, hospital, etc.
Bodymark:	<ul style="list-style-type: none"> • Bodymark patterns for all application,40 types • Support transducer mark
	<ul style="list-style-type: none"> • BMV Logo • Hospital Name • Exam Date • Exam Time
	<ul style="list-style-type: none"> • ID, Name • Probe • Focus Position • Image Parameters
Screen Displayed Info*	

*Not all items are listed in here, please refer to user manual for detailed info.

Measurement & Calculations

General B mode Measurement:	distance, circumference, area, volume, EF rate, heart rate, Time
M mode:	Distance, time, slope, Heart Rate
OB Measurements:	The measurement function is arranged by exam type(BPD, GS, CRL, FL, HC, AC, EDD, GA, FW) and is available for use with all exam type (Canine, Feline, Ovine, Bovine, Equine).*

Physical Spec

Body marks:

*Individual Measurements and Calculation packages for different applications.

Peripheral Ports

Port: Video (PALD, NTSC), USB 2.0, Mouse

Storage and Data Management

Exam Management

- "Ultrasound Station" for patient management
- Able to review current exam and past exam
- Able to export file as JPG/PNG/BMP
- Able to back up data to USB device

Multi-frequency probes

Optional

3.5MHz convex array transducer (standard configuration for FarmScan® L60 Convex)

PIG-SHEEP-GOAT ANIMAL Applications: Pregnancy diagnosis, Pregnancy control, Counting
Frequency Bandwidth: 2.0/3.5/5.0MHz
Central frequency: 3.5 MHz
Radius: 60 mm
View angle: 61 degrees
Scanning Depth: 36-351 mm
Element: 128

3.5Mhz *rectal curve* array transducer (standard configuration for FarmScan® L60 Curve)

PIG-SHEEP-GOAT ANIMAL Applications: Pregnancy diagnosis, Pregnancy control, Counting
LARGE ANIMAL (Dairy cattle, Beef cattle)Applications: Pregnancy diagnosis, Reproduction, Sexing, Abdominal
Frequency Bandwidth: 2.0/3.5/5.0MHz
Central frequency: 3.5 MHz
Radius: 60 mm
View angle: 61 degrees
Scanning Depth: 36-351 mm
Element: 128

65C15S micro-convex array transducer

SMALL ANIMAL Applications: Pregnancy control & reproduction diagnosis, Abdominal exams
Frequency Bandwidth: 5.0/6.0/7.5/8.0MHz
Center frequency: 6.5 MHz
Radius: 15 mm
View angle: 100.7 degrees
Scanning Depth: 36~184 mm
Element: 128

Linear probes (optional)

7.5Mhz Linear array transducer

EQUINE/LARGE ANIMAL Applications: Obstetrics, Chest/lung exam, Transrectal Examination of Sacroiliac Joints & LumboSacral nerve roots
Frequency Bandwidth: 5.5/7.5/9.0MHz
Center frequency: 7.5MHz
Scanning width: 40 mm
Scanning Depth: 10~184 mm
Element: 128

<p>3.5Mhz 155mm Linear Back Fat array transducer(standard configuration for FarmScan® L70)</p>	<p>PIG-SHEEP-GOAT ANIMAL Applications:Animal Science such as Backfat checking, Eye muscles. Frequency Bandwidth: 2.0/3.5/5.0MHz Center frequency: 7.5MHz Scanning width: 155 mm Scanning Depth: 10~184 mm Element:96</p>
<p>6.5Mhz Rectal linear array transducer (standard configuration for FarmScan® L60 Linear)</p>	<p>EQUINE/LARGE ANIMAL Applications: Large Animals Reproductive, Equine Tendon Frequency Bandwidth: 5.0/6.5/7.0/8.5MHz Center frequency: 6.5 MHz Scanning width: 70 mm Scanning Depth: 18~184 mm Element: 96</p>

Certificate and Security

<p>Quality Standard:</p>	<p>ISO 9001, ISO 13485 ISO 13485:2003 EN 60601-1:2006</p>
<p>Design Standards:</p>	<p>EN 60601-1-2:2007 EN 60601-1-4:2005 EN 60601-2-37:2008 EN 61157:2007 EN ISO 10993-1:2009 EN ISO 10993-5:2009 EN ISO 10993-10:2009</p>

Standard Configurations

<p>Standard Configurations</p>	<p>FarmScan® L60/L70 main unit 5.8" TFT color LCD One transducer connector One USB port TV-out port AC/DC adaptor cine loop image storage Pseudo color imaging Plenty of veterinary measurement&calculation software packages Rechargeable lithium-ion battery 2600mAh Water proof field working bag One rectal transducer Transport case (Metal case)</p>
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Options:

<p>Optional</p>	<p>Rectal linear array transducer (6.0/7.5/8.5/10.0MHz) Rectal curve array transducer (3.0/3.5/4.0/5.0MHz) Linear array transducer (6.0/7.5/8.5/10MHz) Micro-convex array transducer (5.0/6.0/7.5/8.0MHz) Convex array transducer (3.0/3.5/4.0/5.0MHz) Extra rechargeable battery (2600mAh, up to 4 hours working time) Hood sheath Rectal linear probe introducer Rectal convex probe introducer I-Scan® V2 Ultrasound goggles Car charger Video printer</p>
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