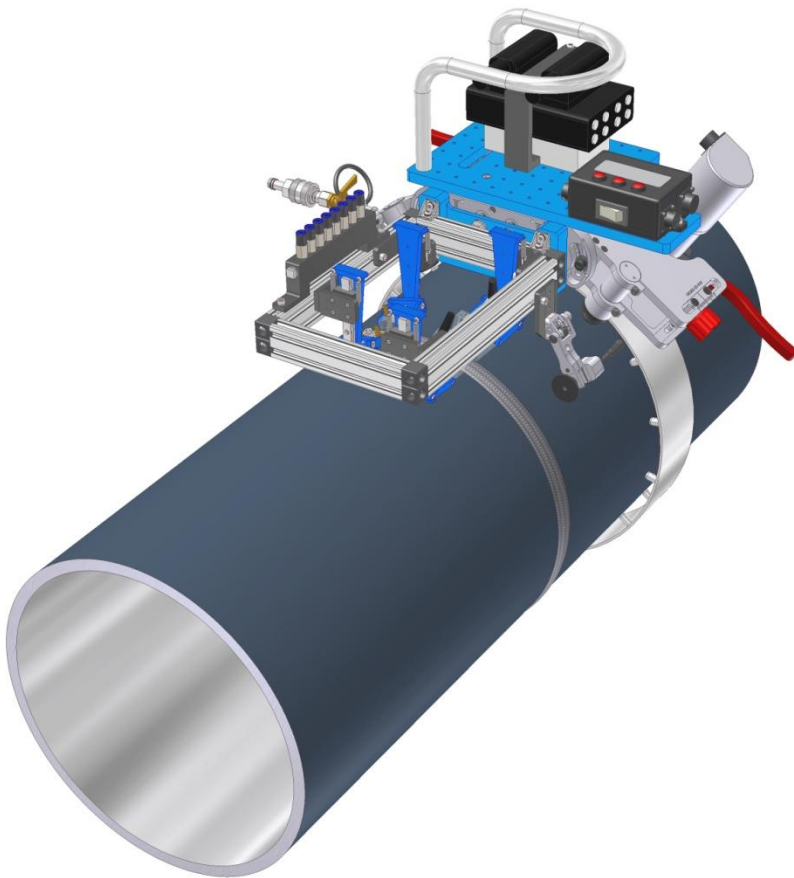
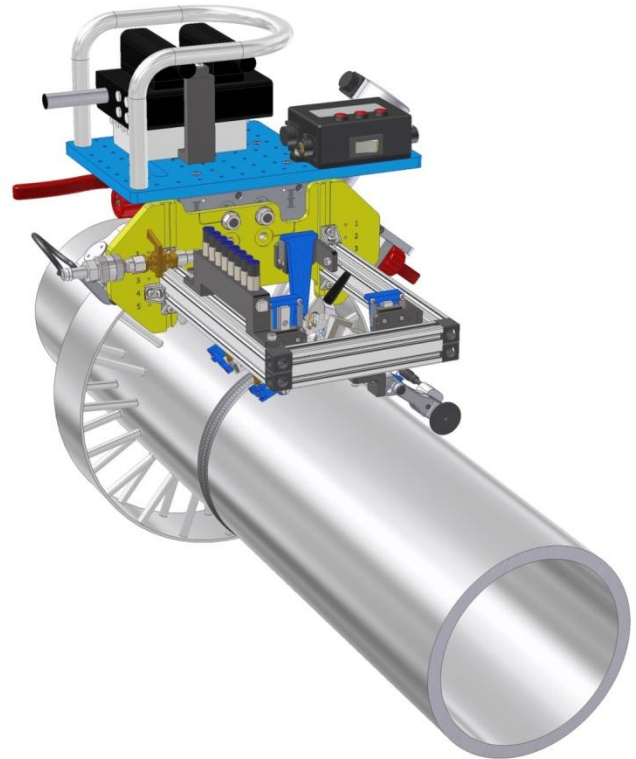


ESPipeScanner with Motor Control

Product Info Guide



*For large pipe,
Models No.: ESPS-LM*



*For small pipe,
Models No.: ESPS-SM*

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Please Note:

The purpose of this manual is to provide information for product mechanical aspects, parts assembly and adjustments only. It is not intended as a guide for NDT procedures, techniques, data collection or data interpretation.

All pipe sizes shown in this manual refer to the ANSI Pipe Schedule standard. All imperial pipe sizes specified are nominal, all metric pipe sizes specified as (mm) are actual.

It is the responsibility of the end user to use this product in a safe manner and in accordance with any local or regional safety legislation.

The information provided by Eclipse Scientific is believed to be accurate however Eclipse Scientific accepts no responsibility for the use of this product, nor any patent infringement or other rights of third parties. Eclipse Scientific reserves the right to change specifications without notice. Please contact Eclipse Scientific for the most current product information.

Overall Pipe Scanner Specifications

Intended Band Use

The ESPipeScanner is a drive platform that is to be used to automatically move a scanning system along a circumferential and longitudinal path of a pipe. The Pipe Scanner has been designed to be used in conjunction with a suitable pipe bands.

The pipe band must be:

- Of a suitable type such as:
CRC-Evans® (model no.'s ESPS...C) or
Vermaat Technics® (model no.'s ESPS...V)
- Outside Diameter range of: 12" (324 mm) to flat
- Width range of: 80mm (4 1/8") to 130mm (5")
- Main band suspended a minimum of 12mm (1/2") standoff above pipe surface
- Overlap section suspended a minimum of 9mm (3/8") above pipe surface
- Band clamping buckle/hardware must not exceed 20mm (3/4") above main band

Intended User

The ESPipeScanner is intended to be used by one or more personnel being without limitations in the physical abilities of the upper and lower limbs, sight, or hearing and who are fully trained in the handling of UT pipe scanning equipment.

Approximate Dimensions and Weight

Scanner Weight*:	11.5 kg	25 lbs
Scanner Dimensions*:	61 x 22 x 25 cm	24" x 8.5" x 9.5"

*excluding case, attachments, umbilical, power supply, and hand held control

NOTE: The Pipe Scanner requires a minimum radial clearance of 26cm (10") from the pipe band surface.

Performance Specifications

Payload*:	27 kg	60 lbs
Umbilical Length: (Standard)	15 m**	50 ft**
Hand held control cable length:	5 m**	20 ft**
Scan Speed:	0 - 76.2 mm/sec.	0 - 3 in/sec.

*Attachments and umbilical are considered part of payload

**Standard length. Other are lengths available upon request.

Power Requirements



WARNING! A reliable power source must be used for powering the scanner. Connections must be secured to prevent accidental disconnection. Power failure may cause the scanner to freewheel down. Keep clear of the scanner when in operation at all times. Portable generator usage is not recommended unless accompanied by the use of an uninterruptible power supply system.



WARNING! Proper grounding of the power supply is important for safe operation. If a generator is being used to supply power to the system (not recommended), the generator must be properly grounded (see the manufacturer's generator manual).

Power Requirements: 12-24V DC 10 amp or 100–240V AC with power supply.

NOTE: The power supply automatically adjusts to the supplied voltage.

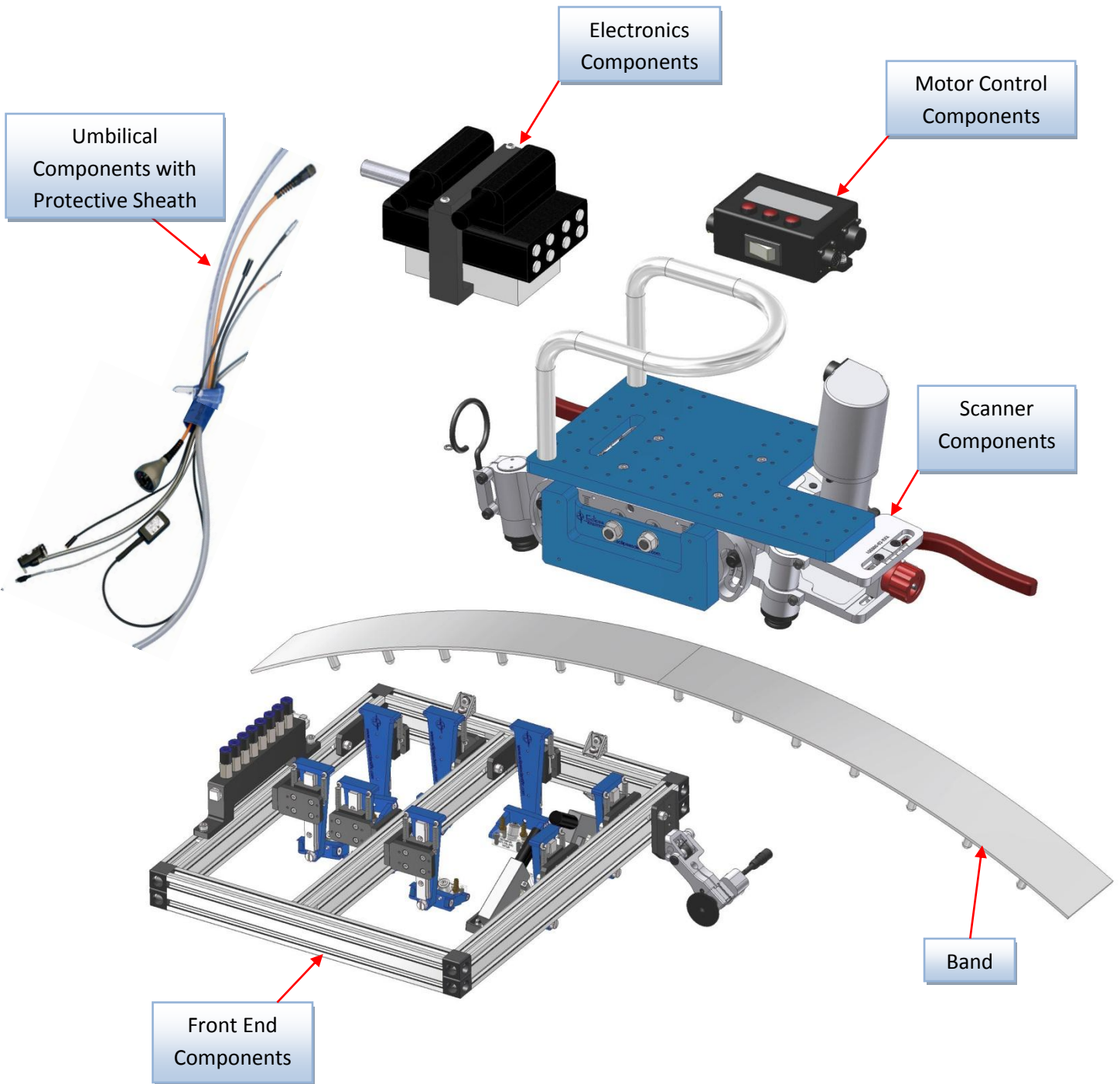
Operating Environment

The Pipe Scanner is designed for use in an industrial environment that is:

- dry or wet (the system, excluding the umbilical and power supply, is splash proof);
- between -20°C (-4 °F) and 40°C (104 °F);
- free of explosion or fire hazards.

ESPS-M Main Components

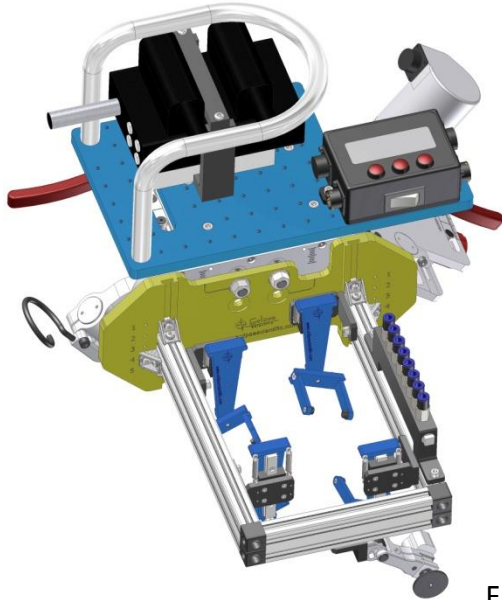
6 main component types make up the Pipe & Vessel Scanner with Motor Control:



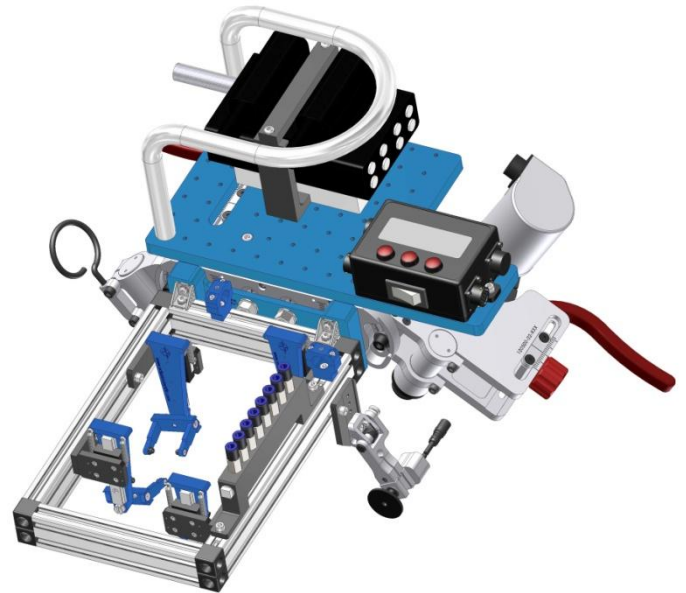
Scanner Types & Standard Front End

The Pipe & Vessel Scanner can be outfitted with 2 types of standard front ends to allow scanning of small or large pipe:

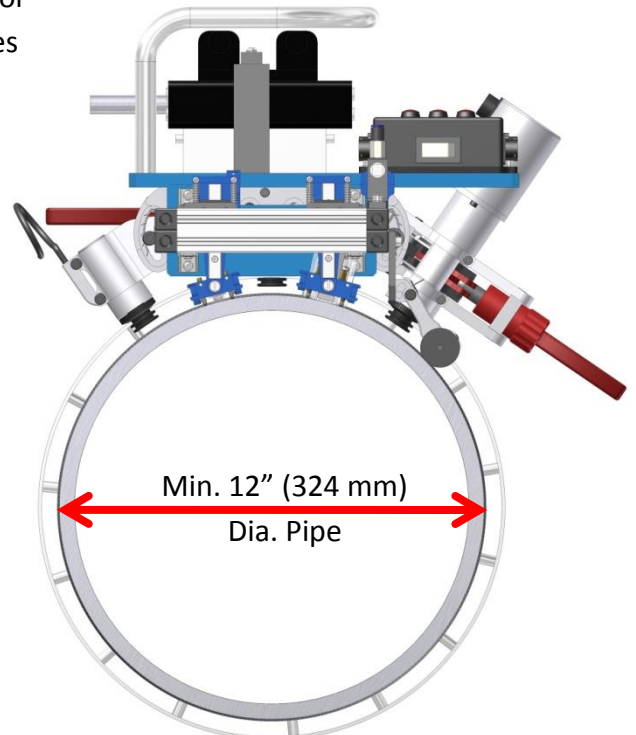
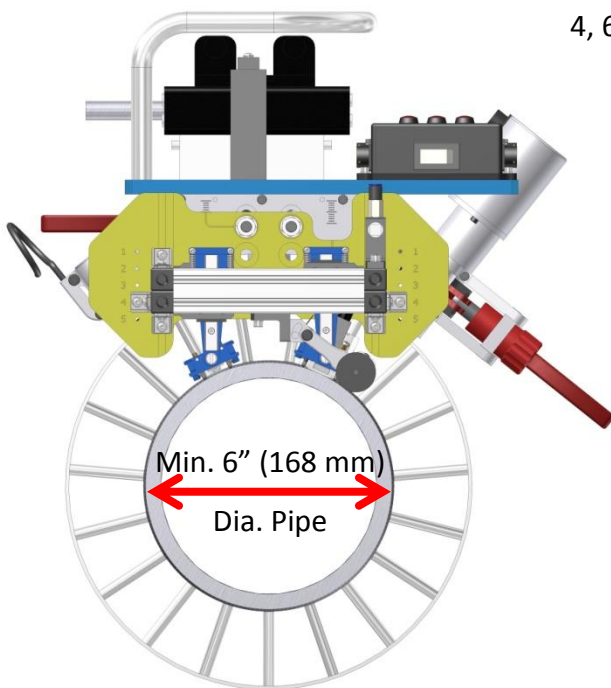
ESPS-SM
Scanner for small pipe



ESPS-LM
Scanner for large pipe



Front mounting frames
have capacity for
4, 6 or 8 probes



Component options for ESPS-M Scanner

1. Front end frame components for small pipe

For ESPS-S scanner only,

PV-FS4A1-12

-with 4-probe capacity

-for pipe diameters 6" (168 mm) to 12" (324 mm)

For use with large standoff band



Front end frame components for large pipe

For ESPS-L scanner only

PV-FL4A1-12

-with 4-probe capacity

-for pipe diameters 12" (324 mm) to 30" (762 mm) & larger

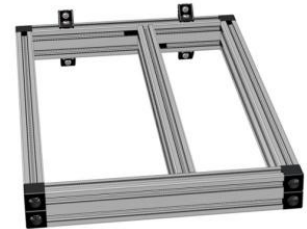


For ESPS-L scanner only

PV-FL6A1-24

-with 6-probe capacity

-for pipe diameters 24" (610 mm) to 60" (1524 mm) & larger

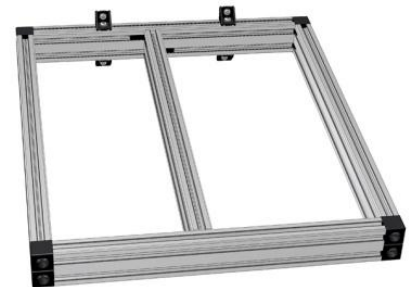


For ESPS-L scanner only

PV-FL8A1-36

-with 8-probe capacity

-for pipe diameters 36" (914 mm) & larger



2. Down Slides

For P1 type Pipe wedges with yoke mounting holes
SCA-SFL20-180-PWZ1



For Phased Array type wedges with fixture mounting holes
SCA-SFL20-90P-L – Left mounting
SCA-SFL20-90P-R – Right mounting



Right shown

For TOFD type wedges with fixture mounting holes
SCA-SFL20-90T-L – Left mounting
SCA-SFL20-90T-R – Right mounting



Left shown

3. Wedges

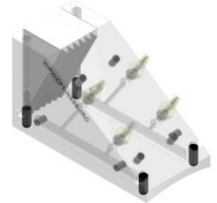
Wedges are irrigated and come with carbides and hose barbs

Pipe Wedges with yoke mounting holes

55 degree shear for P1 probe

WPWZP1-N55S-IRC-AOD, profiled to specified pipe diameter

WPWZP1-N55S-IRC, flat setup wedge for A1 probe

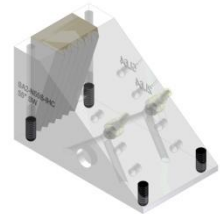


PA Wedges with fixture mounting holes

55 degree shear, for A2 probe

WA2-N55S-IHC-AOD, profiled to specified pipe diameter

WA2-N55S-IHC, flat setup wedge



TOFD Wedges with fixture mounting holes

45 degree longitudinal

WTL1645A-IHC-AOD, profiled to specified pipe diameter

WTL1645A-IHC, flat setup wedge



55 degree longitudinal

WTL1955A-IHC-AOD, profiled to specified pipe diameter

WTL1955A-IHC, flat setup wedge

60 degree longitudinal

WTL2060A-IHC-AOD, profiled to specified pipe diameter

WTL2060A-IHC, flat setup wedge

WTL2160A-IHC-AOD, profiled to specified pipe diameter

WTL2160A-IHC, flat setup wedge

65 degree longitudinal

WTL2165A-IHC-AOD, profiled to specified pipe diameter

WTL2165A-IHC, flat setup wedge

70 degree longitudinal

WTL2270A-IHC-AOD, profiled to specified pipe diameter

WTL2270A-IHC, flat setup wedge

Contact



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