

Pipeline Television Inspection System in Outfitted 8x16 Trailer

This sewer television system is delivered complete, ready for operation. The system includes a pan & tilt camera and transporter with inspection capacity from 6" to 36" lines.

REF Quote Line 1 - System and Outfitting

1 Tandem axle trailer, 8'x16' body, 12,000 GVWR. See Line 2 for full trailer specs, to which Aries will include:

- 2 Adjustable LED floodlights, mounted above rear doors, with switch at rear doors
- 1 Vehicle exterior lighting package, including
 - 1 LED traffic advisor, mounted rear facing, with controller mounted at rear door
 - 2 Amber LED strobe lights, lea mounted front and rear of roof
 - 1 Strobe control switch in traffic advisor controller
- 1 Winter door set, including:
 - 1 LR TV cable door, sized for storage beneath reel

1 7,000W, gas powered, commercial grade generator, 120V, 60 Hz, with electric local and remote start/stop control to include:

- 1 OEM generator enclosure, tongue mounted, with 14-gallon EVAP-certified fuel tank
- 1 Hinged, vented cover with lock mechanism
- 1 Exhaust system with internal muffler
- 1 Auxiliary battery, 12V DC and case
- 1 DC converter, 45A
- 1 Electric distribution panel and circuit breaker box, 8-space
- 1 Electric supply transfer system, house power or generator system, automatic, 50A
- 1 35' cord and house power receptacle with cover
- 1 System engineering panel to include:
 - 1 Generator voltage and frequency meter, digital
 - 1 Generator start/stop switch
 - 1 Generator hour meter

1 Trailer control room interior including:

- 1 Lonplate non-skid floor covering
- 1 White laminated surface wall and ceiling covering
- 1 Bulkhead wall with Plexiglas window and swing passage door to equipment room
- 1 Low profile roof mounted air conditioner, 11000 BTU with heat strip
- 1 Wall mounted 1500-watt heater
- 1 Modular control center, 19" rack mounted above bulkhead window
- 1 Ergonomically contoured and finished control desk
- 1 LED lighting system
- 1 Standard electrical upfitting package
- 1 Operator chair, swivel with casters
- 1 Fire extinguisher, 10lb, 4A60 B:C rating, OSHA/DOT-approved
- 1 Padded bench seat with storage underneath
- 1 Closet/cabinet/storage space, 74"H, minimum 4 removable shelves

Page 1 of 5



1 Trailer equipment room interior including:

- 1 Lonplate non-skid floor covering
- 1 White laminated surface wall and ceiling covering
- 1 Standard electrical upfitting package
- 1 LED lighting system
- 1 Wall mounted 1500-watt heater
- 1 Set equipment storage brackets and hooks
- 1 Set of tie down rings along floor, shipped loose
- 1 Work bench with Lonplate worktop and vise
 - 1 Storage cabinet over work bench with light underneath
- 1 9-drawer tool chest with locking hasp
- 1 Equipment storage shelf, 3 levels, 40x18, between reel and bulkhead
- 1 Spare tire storage devices
- 1 Downhole pole storage brackets, wall mounted

1 Water wash down system for equipment clean-up including:

- 1 Water storage tank, 19-gallon
- 1 Set of fill, vent and drain connections
- 1 Water tank demand pump
- 1 25' retractable wash down hose with spring-loaded hand nozzle

1 19" LCD flat panel monitor, TV/PC viewing, mounted to control room desktop

- 1 19" LCD flat panel monitor, PC viewing, mounted to control room desktop
- 1 19" LCD flat panel monitor, TV viewing, mounted rear viewing in equipment room

1 Aries VL5000 video data display including:

- 1 Data Display control module, panel mounted
- 1 Alpha/Numeric Full QWERTY Keyboard for video titling and report data input for VL5000 Display
- 1 Set of interconnect cables

1 Rack-mounted computer and video overlay system, including:

1 Industrial hardened case with air filtering, shock mounts for hard drive and CPU fan, peripheral cards support bar, 19" rack, 3U high

3.2GHz (Max 4.0) Intel Quad Core i7 processor, 8MB cache

8GB of RAM, DDR3

1TB SATA hard drive, 7200rpm, storage

256GB solid state hard drive, boot

(2) RJ45 ethernet ports

(10) USB ports, 4x USB3.0 + 6x USB2.0, 2x USB3.0 located on front of PC

Serial port on rear of chassis, DB9

DVD burner with Nero 12.0

Wireless network adapter

- 1 Wireless keyboard and optical mouse
- 1 Windows 10 operating system, 64-bit
- 1 1TB USB-connection external hard drive

1 Wall-mounted USB port at desktop

Page 2 of 5



- 1 UPS back-up battery system, rack mount
- 1 Microphone with on/off switch for placing audio onto inspection video
- 1 USB video capture device for ITpipes
- 1 Loading & testing of the Customer's ITpipes software
 - Please note ITpipes will load the software over the web while here at Aries Industries. ITpipes has requested we setup an appointment with their Tech Support staff before they load the software. ITpipes will load the Customer's software license.

1 Color TV power control unit, multi-conductor, modular control center mount, with:

- 1 Camera power supply with adjustable voltage and amp level, DC amp and voltmeters, on/off switch and circuit breaker
- 1 TV camera light head intensity control with on/off switch and circuit breaker
- 1 Light head power supply with DC amp and voltmeters, switch and circuit breaker
- 1 Light head power selector switch, 5-position with light head bulb overdrive auto resetting protective circuit breaker
- 1 Set pre-wired connections for tractor and/or pan and tilt camera controllers

1 Aries PE3430 Pathfinder series zoom, pan & tilt cameras w/ high-intensity LED lighting and integrated self-cleaning lens wiper system, each including:

Pathfinder zoom pan and tilt camera w/ multi-axis infinite rotation

Integrated on-demand self-cleaning lens wiper system

120X zoom (10X optical & 12X digital)

High-resolution 480(V) x 720(H) output

Auto-focus with manual override

Auto-iris with manual override

Maintenance-free forward-facing white LED lighting located in the camera forks

Maintenance-free directional white LED lighting that follows the camera's field of view

White balance optimization with (4) selectable settings

High-sensitivity camera sensor for low-light applications

"Starlite" low-light level amplification feature with (4) user selectable amplification steps

Automatic home feature with forks at top and bottom of camera head

"One Touch Scanning" feature with (2) user selectable continuous joint scan presets

"Quick Look" preset view positions (6) (Up, Down, Right, Left, Lat R, Lat L)

Robust, environmentally sealed camera for use in live pipe, including:

Scratch-resistant sapphire lens window

Camera recessed behind forks for frontal impact protection

Camera housing with hardened metal finishes and non-corrosive metals

Recessed fasteners & no camera protrusions

Proportionately slowed camera movements when zooming

Fast-check internal pressure monitoring system

On-screen camera diagnostics functions including:

Camera internal pressure, temperature, operating hours, internal power regulated voltage value, camera model, serial number, firmware revision, control error recognition, LED current value.

1 Camera storage and transport case

Page 3 of 5



- 1 Camera nitrogen recharge kit
- 1 Desktop dual mode camera controller including: joystick for axial rotation and pan and tilt angle; remote focus; zoom in/out; home, diagnostics, iris open/close, Starlite, and preset buttons

1 Aries TR3320 Pathfinder steerable self-propelled transporters for relined 6" to 36" lines, each including:

- 1 Tractor assembly with continuous duty drive motors
- 6 Rubber wheels, 3" diameter
- 4 Rubber wheels, 4" diameter
- 4 Extended hub rubber wheels, 4" diameter
- 4 Extended hub rubber wheels, 5" diameter
- 1 Remotely-operated electric camera lifting mechanism
- 1 Fast-check pressure monitoring system
- 1 Rear viewing camera with LED lighting
- 1 512 Hz internal locating beacon
- 1 Integrated inclinometer system
- 1 Storage and transport case
- 1 Set maintenance parts

1 Tractor control system, including:

- 1 Tractor power supply and control module with volt and amp meters, circuit breakers (2), on/off switch and direction control display, rack mount location
- 1 Hand-held Pathfinder series tractor controller
- 1 Foot pedal controller, fwd/rev only, at rear of vehicle
- 4 Double wide "dually" extended hub wheels for larger lines, 5" diameter
- 4 Carbide impregnated high traction wheels, 4" diameter
- 1 Large diameter pipe kit with geared side rails and 8" diameter rubber tires for operation up to 36" lines
- 1 Pathfinder cable and reel assembly, with features including:

1200' of lightweight low friction multi-conductor cable

Heavy-duty frame, drum and motor assembly with clutch and cable level wind assembly Footage meter with local LCD footage display and encoder for footage signal to remote video data display system

Emergency hand crank arm

Spare cable termination kit

Sealed continuous contact collector assembly, 12 slip rings minimum

Telescoping swivel cable guide roller assembly

- 1 Pathfinder system test cable
- 1 Reel controller with desktop mounting devices
- 1 Interconnect cable to TV system electronics
- 1 Drip pan with drain

1 Mounting bridge with tractor storage underneath

Page 4 of 5



1 Cable manhole guide system including:

- 1 Manhole top roller assembly
- 1 Manhole bottom roller assembly and adapter hook
- 1 Insertion and extractor pole assembly and tractor adapter
 - 3 Quick lock extension poles, fiberglass
- 5 Additional fiberglass extension poles
- 1 Tiger tail bottom cable guide

2 Operation / maintenance and spare parts manuals

- 1 Maintenance tool kit
- 1 6 Month warranty, Aries TV system only

REF Quote Line 2 - Trailer

Trailer, 8'x16' Tandem Axle, 12,000 lb. GVWR

Standard Construction

Interior dimensions: 95" wide x 83" high x 187" long

Gross Vehicle Weight Rating: 12,000 lbs Dexter independent torsion suspension axles

Trailer-rated radial tires

Modular-styled wheels w/E-coat prime & powder coat finish

All-wheel electric brakes w/12V breakaway switch, battery included

Welded in place safety chains

Phosphate power washed and all exposed metal painted

Z-Tech undercoated frame

Long life coating on all fasteners

Automotive style weather stripping

Formed steel rear header with recessed clearance lights

Double 8" I-Beam Mainframe

12" on-center Floor Members

.030 exterior aluminum with 16" on-center wall posts

Aluminum roof with 24" on-center bows

ABS molded license plate holder with light

Additional Construction

Extended triple tube tongue with switchable 2-5/16" ball and pintle hoop hitches

ATP stone guard on front of trailer

Reinforced roof for air conditioning unit

Stabilizer jacks at corners

32" curbside door with bar lock

Double swing full opening rear doors with semi-style cam locks

Interior finished in white vinyl

12V dome light

1/4" steel floor backing plate across rear floor

Page 5 of 5