

Crab-Robot

Technical specifications



Crab-Robot: System-Chart

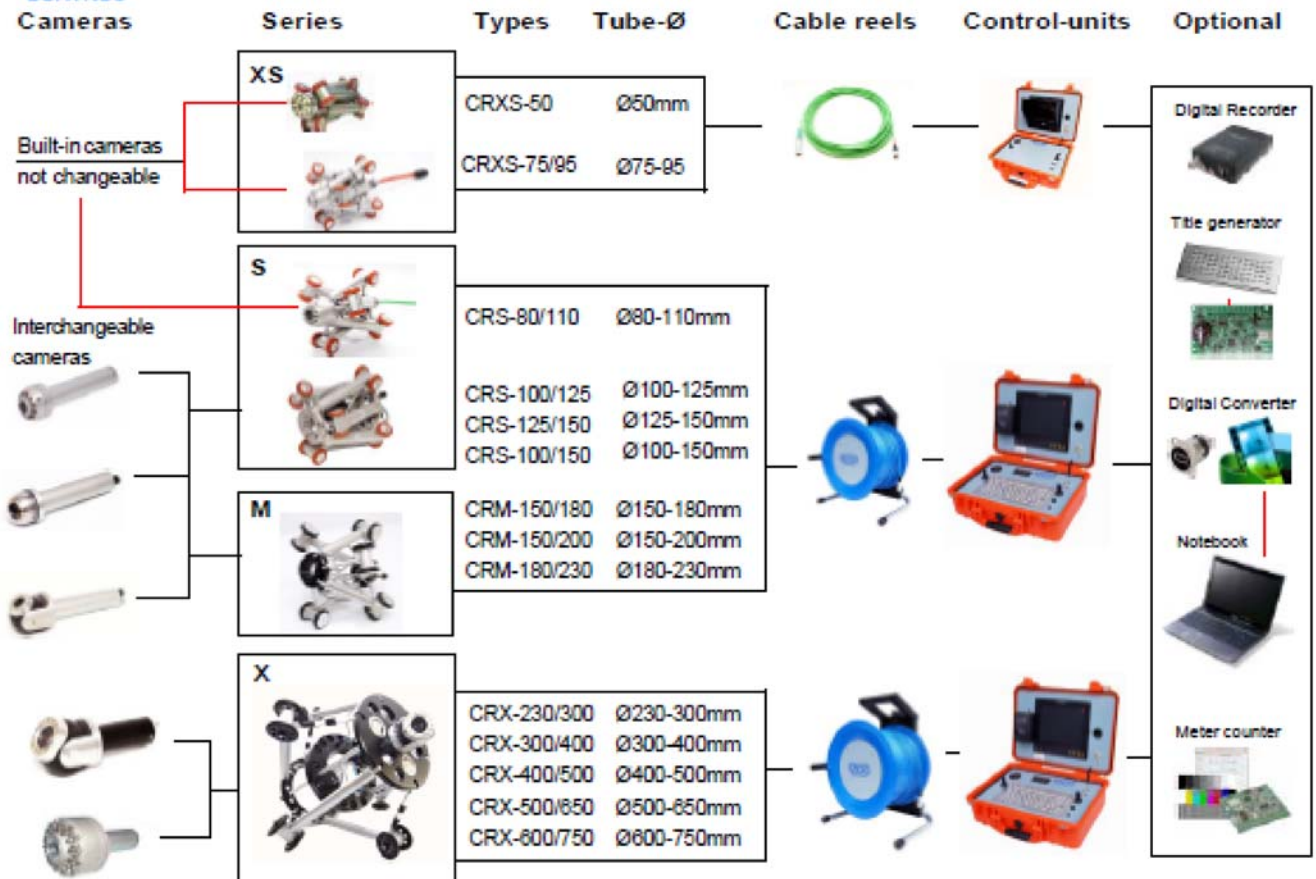


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Data Sheet: XS-Series



Crab-Robot CRXS-50



Technical specifications:

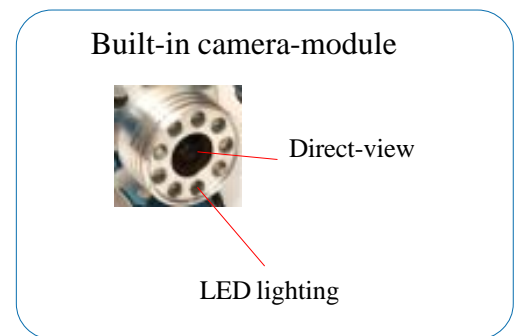
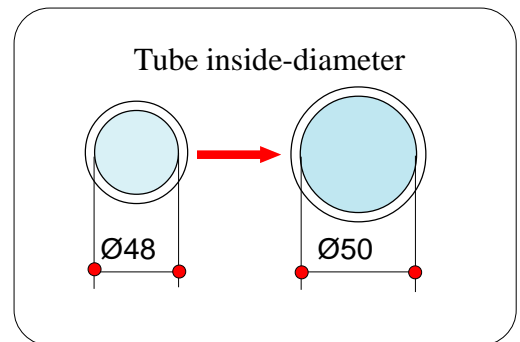
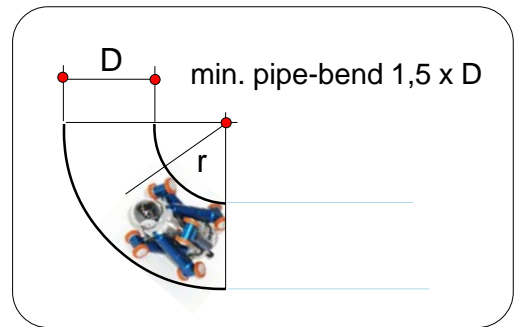
Min. diameter:	48mm
Max. diameter:	50mm (2")
Length:	92mm
Weight (without camera):	0,15 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	14mm
Wheel material:	Natural rubber - e
Ball bearings:	18
Micro-motors:	6
Voltage:	12VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	246:1
Max.speed:	4m/min.
Horizontal traction force:	35 N
Cameramodule:	not changeable
Operating temperature	-10°C to +50°C
Recomm. max.cable length:	20-30m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: *built-in*

Available Control-units: *CUS-7P for S+M series*
CUXS-7 for XS- series

Available cable reel: *CRXS-30*



Data Sheet: Customized



Crab-Robot CRXS-50/75

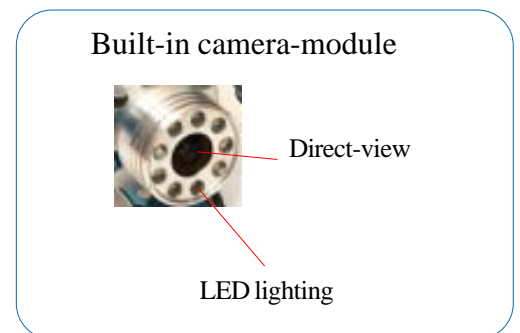
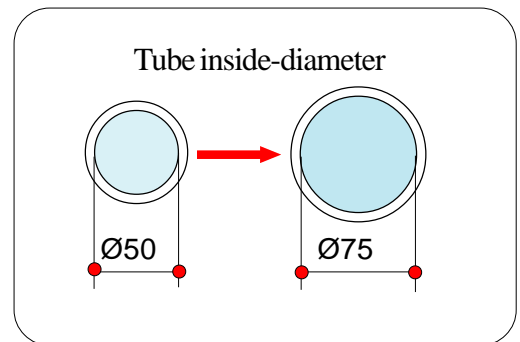
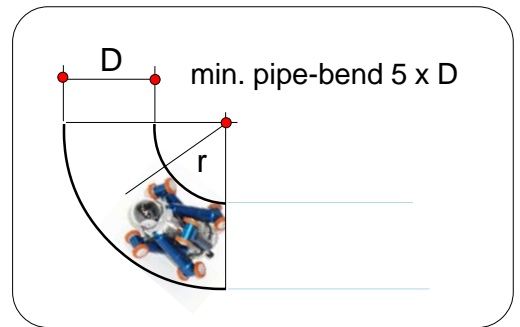


Technical specifications:

Min. diameter:	50mm
Max. diameter:	75mm (2")
Length:	92mm
Weight (without camera):	0,25 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Smallest tube bend:	5xd
Driven wheels:	12
Wheel diameter:	14mm
Wheel material:	Natural rubber
Ball bearings:	18
Micro-motors:	6
Voltage:	12VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	246:1
Max.speed:	4m/min.
Horizontal traction force:	35 N
Cameramodule:	not changeable
Operating temperature	-10°C to +50°C
Recomm. max.cable length:	approx. 20m

Technical specifications camera module:

Image-sensor	1/3" SONY Super HAD CCD
TV lines	480 TV Lines
Pixels	352.000
Minimum illumination	2,5 Lux/F2,2
Focus	Fixfocus
Lens	3,8mm
Ligthning system	8 High intensity LED
Operating temperature	-10°C - +50°C



Cable reel



Data Sheet: XS-Series



Crab-Robot

CRXS-75/95

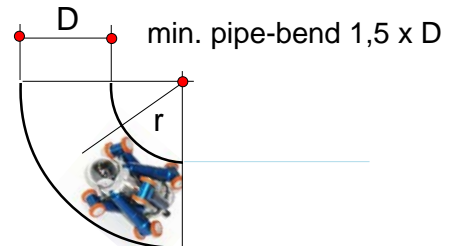
Technical specifications:

Min. diameter:	75mm (3")
Max. diameter:	95mm (4,3")
Length:	120mm
Weight (without camera):	0,54 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	1 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	20mm
Wheel material:	Natural rubber - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	12VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	134:1
Max.speed:	4m/min.
Horizontal traction force:	46 N
Operating temperature	-10°C to +50°C
Cameramodule:	not changeable
Recomm. max.cable length:	30m

The maximum cable length is dependent on number of pipe bends

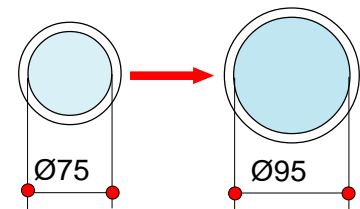
Technical specifications camera module:

Image-sensor	1/2" SONY Super HAD CCD
TV lines	700 TVL
Pixels	438.000
Minimum illumination	2,5 Lux/F2,0
Focus	Fixfocus
FOV, field of view	150°
Ligthning system	16 High intensity LED
Operating temperature	-10°C - +50°C



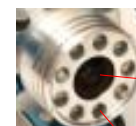
smaller tube bends upon request

Tube inside-diameter



variable adjustable

Built-in camera-module



Direct-view

LED lighting

Control-units



CUS-7P

Cable reel



CARXS-30

Crab-Robot

CRXS-80/110

Technical specifications:

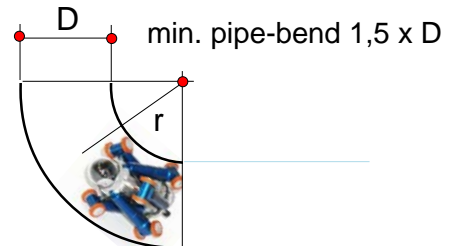
Min. diameter:	80mm (3")
Max. diameter:	110mm (4,3")
Length:	122mm
Weight (without camera):	0,595 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	20mm
Wheel material:	Natural rubber - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	134:1
Max. speed:	4m/min.
Horizontal traction force:	46 N
Operating temperature	-10°C to +50°C
Cameramodule:	Built-in, not changeable
Recomm. max. cable length:	40m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: built-in

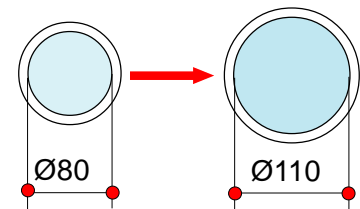
*Available Control-units: CUS-10P for S+M series
CUSX-10P for S,M+X series*

Available cable reel: CRS-30



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Built-in camera-module



Direct-view

LED lighting

Control-unit



CUS-7P

Cable reel



CARS-30

Crab-Robot

CRS-100/125

Small tube bend 1xd



Technical specifications:

Min. diameter:	100mm (4")
Max. diameter:	125mm (5")
Length:	122mm
Weight (without camera):	0,64 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1xd
Driven wheels:	12
Wheel diameter:	20mm
Wheel material:	Natural rubber - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	134:1
Max.speed:	4m/min.
Horizontal traction force:	95 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	50m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: **CM-35F**, direct view with fixfocus

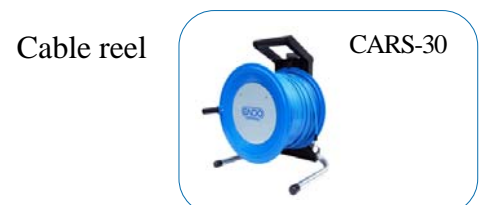
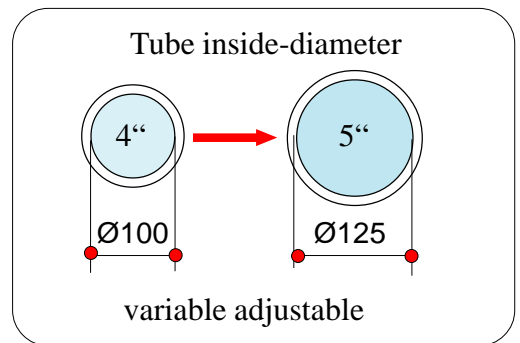
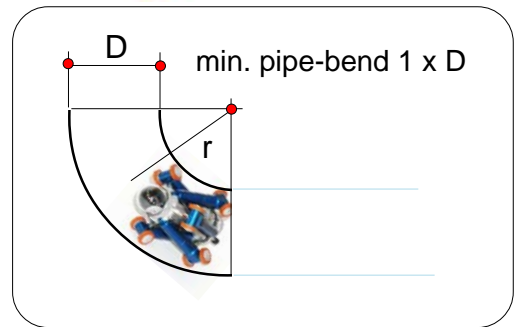
PT-35F, Pan&Tilt camera + fixfocus

Available Control-units: **CUS-10P** for S+M- series

CUSX-10P for S,M+X -series

Available cable reel:

CRS-30



Data Sheet: S-Series



Crab-Robot CRS-100/150



Technical specifications:

Min. diameter:	100mm (4")
Max. diameter:	150mm (6")
Length:	140mm
Weight (without camera):	0,75 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	20mm
Wheel material:	Natural rubber - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	134:1
Max.speed:	4m/min.
Horizontal traction force:	95 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	50m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: CM-35F, direct view with fixfocus

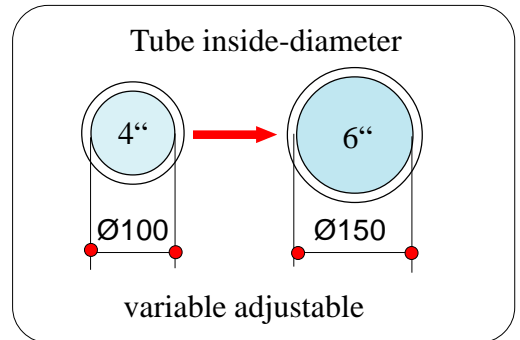
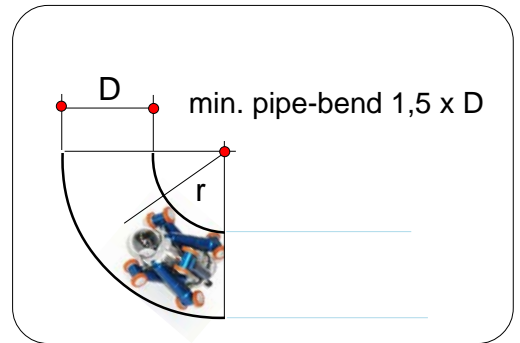
PT-35F, Pan&Tilt camera + fixfocus

Available Control-units: CUS-10P for S+M- series

CUSX-10P for S,M+X -series

Available cable reel:

CRS-30



Data Sheet: S-Series



Crab-Robot

CRS-100/150Twin



Technical specifications:

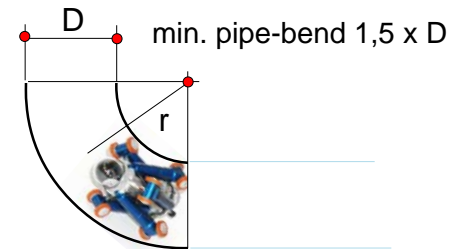
Min. diameter:	100mm (4")
Max. diameter:	150mm (6")
Length:	122/450mm
Weight (without camera):	1,45 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	24
Wheel diameter:	20mm
Wheel material:	Natural rubber - easily changeable
Right angle gear boxes:	12
Bevel gears:	24 - steel machined
Transmission ratio:	1:1
Ball bearings:	36
Micro-motors:	12
Voltage:	24VDC
Gearboxes:	12
Gear type:	Planetary gear
Transmission ratio:	134:1
Max.speed:	4m/min.
Vertical traction force:	190 N
Operating temperature	-10°C to +50°C
Cameras module:	built-in, not changeable
Recomm. max.cable length:	90m

The maximum cable length is dependent on number of pipe bends

- Available camera-modules:* **CM-50F**, direct view with fixfocus
PT-35F, Pan&Tilt camera + fixfocus
- Available Control-units:* **CUS-10P** for S+M- series
CUSX-10P for S,M+X -series
- Available cable reel:* **CRS-30**

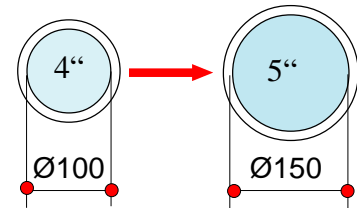


Twin version for long distance



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Changeable camera-modules



Control-unit



Cable reel



Data Sheet: Customized



Crab-Robot for 90° corner

CRS-95/105C

Technical specifications:

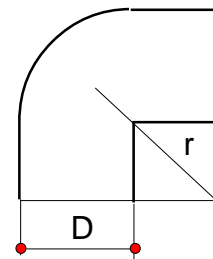
Min. diameter:	95mm
Max. diameter:	105mm
Length:	122mm
Weight (without camera):	0,64 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	20mm
Wheel material:	Natural rubber - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	134:1
Max.speed:	4m/min.
Vertical traction force:	95 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	50m

The maximum cable length is dependent on number of pipe bends

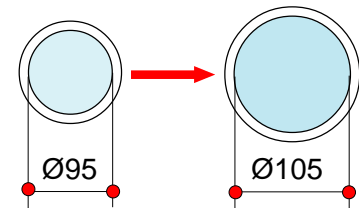
Available camera-modules:	CM-50F , direct view with fixfocus PT-35F , Pan&Tilt camera + fixfocus
Available Control-units:	CUS-10P for S+M- series CUSX-10P for S,M+X -series
Available cable reel:	CRS-30



min. pipe-bend 0,8 x D



Tube inside-diameter



variable adjustable

Changeable camera-modules



CM-50F



PT-35F

Control-unit



CUS-7P

Cable reel



CARS-30

Data Sheet: Customized



Crab-Robot for 90° corner CRXS-70/80C

Technical specifications:

Min. diameter:	70mm
Max. diameter:	80mm
Length:	122mm
Weight (without camera):	0,64 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	20mm
Wheel material:	Natural rubber - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	134:1
Max.speed:	4m/min.
Vertical traction force:	46 N
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	30m

The maximum cable length is dependent on number of pipe bends

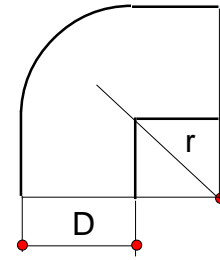
Available camera-modules: built-in

*Available Control-units: CUS-10P for S+M series
CUSX-10P for S,M+X series*

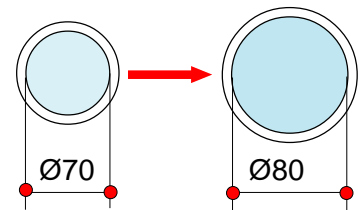
Available cable reel: CRS-30



min. pipe-bend $0,8 \times D$



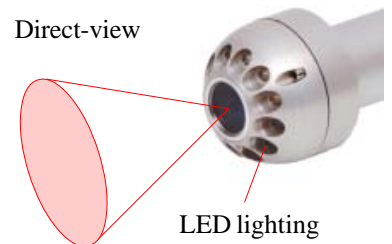
Tube inside-diameter



variable adjustable

Built-in camera-module

Direct-view



LED lighting

Control-units



CUS-10P



CUSX-10P

Cable reel



CARS-30

Data Sheet: M-Series



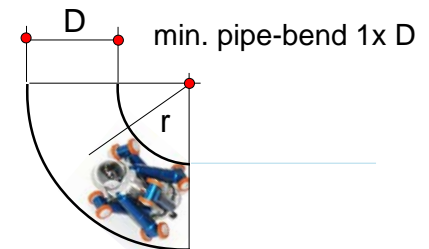
Crab-Robot CRS-150/180

Technical specifications:

Min. diameter:	150mm (6")
Max. diameter:	180mm (7")
Length:	157mm
Weight (without camera):	1,1 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	123:1
Max. speed:	4m/min.
Horizontal traction force:	95 N
Operating temperature	-10°C to +50°C
Cameras module:	Easily changeable, different camera-modules available
Recomm. max. cable length:	60m

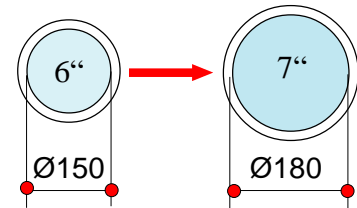
The maximum cable length is dependent on number of pipe bends

Available camera-modules:	<i>CM-35F, direct view with fixfocus</i> <i>PT-35F, Pan&Tilt camera + fixfocus</i>
Available Control-units:	<i>CUS-10P for S+M- series</i> <i>CUSX-10P for S,M+X -series</i>
Available cable reel:	<i>CRS-30</i>



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Changeable camera-modules



Control-unit



Cable reel



Data Sheet: M-Series



Crab-Robot CRS-150/200

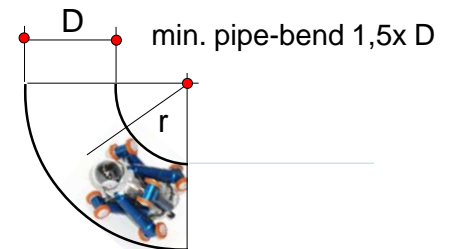
Technical specifications:

Min. diameter:	150mm (6")
Max. diameter:	200mm (8")
Length:	157mm
Weight (without camera):	1,1 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	123:1
Max. speed:	4m/min.
Horizontal traction force:	95 N
Operating temperature	-10°C to +50°C
Cameras module:	Easily changeable, different camera-modules available
Recomm. max. cable length:	60m

Available camera-modules: **CM-35F**, direct view with fixfocus
PT-35F, Pan&Tilt camera + fixfocus

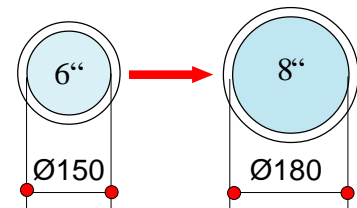
Available Control-units: **CUS-10P** for S+M- series
CUSX-10P for S,M+X -series

Available cable reel: **CRS-30**



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Changeable camera-modules



Control-unit



Cable reel



CARS-30

Crab-Robot

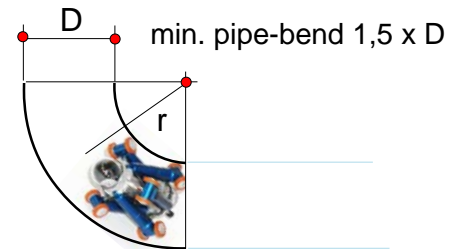
CRM-180/230

Technical specifications:

Min. diameter:	180mm (7")
Max. diameter:	230mm (9")
Length:	208mm
Weight (without camera):	1,3 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber MBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	123:1
Max.speed:	4m/min.
Horizontal traction force:	105 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	60m

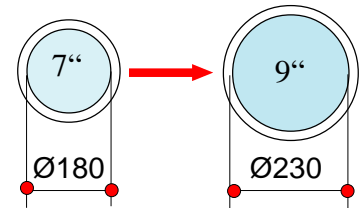
The maximum cable length is dependent on number of pipe bends

- Available camera-modules:*
- CM-35F**, direct view with fixfocus
 - PT-35F**, Pan&Tilt camera + fixfocus
 - PT-55F**, Pan&Tilt camera + fixfocus
- Available Control-units:*
- CUS-10P** for S+M- series
 - CUSX-10P** for S,M+X-series
- Available cable reel:*
- CRS-30**



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Changeable camera-modules



Control-unit



Cable reel



Data Sheet: Customized



Crab-Robot for rough surface

CRM-200/250C

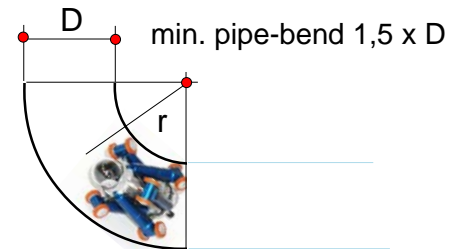


Technical specifications:

Min. diameter:	200mm (8")
Max. diameter:	250mm (10")
Length:	265mm
Weight (without camera):	0,84 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	20mm
Wheel material:	Foam rubber wheels
Shock absorber	6 - adjustable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	1:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	123:1
Max.speed:	4m/min.
Vertical traction force:	145 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	50m

The maximum cable length is dependent on number of pipe bends

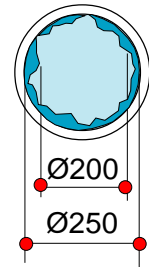
- Available camera-modules: **CM-50F**, direct view with fixfocus
PT-55F, Pan&Tilt camera + fixfocus
- Available Control-units: **CUS-10P** for S+M- series
CUSX-10P for S,M+X -series
- Available cable reel: **CRS-30**



smaller tube bends upon request

Tube inside-diameter

automatic adjustable
8"-10"



Changeable camera-modules



Control-units



Cable reel



Data Sheet: X-Series



Crab-Robot

CRX-230/300

Technical specifications:

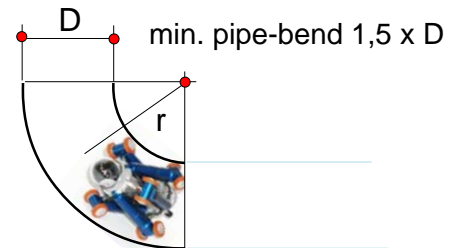
Min. diameter:	230mm (9")
Max. diameter:	300mm (12")
Length:	243mm
Weight (without camera):	2,2 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	2:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	146:1
Max.speed:	4m/min.
Horizontal traction force:	172 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	70m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: **CMX-80F**, direct view + remote focus
PT-Z-80RF, Pan&Tilt + remote-focus

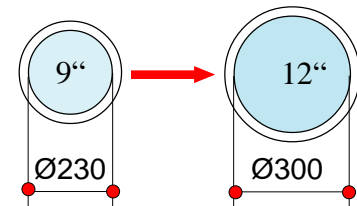
Available Control-units: **CUX-10P** for X series
CUSX-10P for S,M+X series

Available cable reel: **CRX-30**



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Changeable camera-modules



CMX-80RF



PTZ-80RF

Control-units



CUX-7P

Cable reel



CRX-30

Data Sheet: X-Series



Crab-Robot CRX-300/400

Technical specifications:

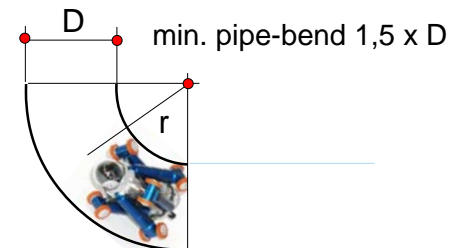
Min. diameter:	300mm (12")
Max. diameter:	400mm (16")
Length:	295mm
Weight (without camera):	3,8 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	2:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	146:1
Max.speed:	4m/min.
Horizontal traction force:	206 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	90m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: **CMX-80F**, direct view + remote focus
PT-Z-80RF, Pan&Tilt + remote-focus

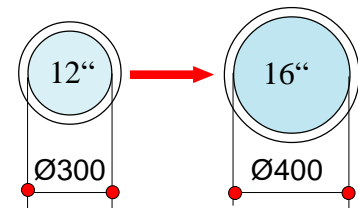
Available Control-units: **CUX10P** for X series
CUSX-10P for S,M+X series

Available cable reel: **CRX-30**



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Changeable camera-modules



CMX-80RF



PTZ-80RF

Control-unit



CUX-7P

Cable reel



CARX-30

Data Sheet: X-Series



Crab-Robot CRX-400/500

Technical specifications:

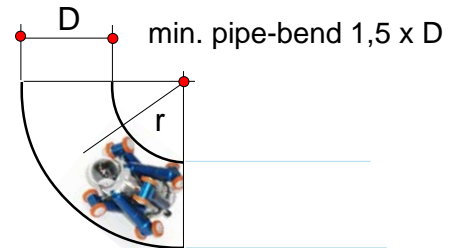
Min. diameter:	400mm (16")
Max. diameter:	500mm (20")
Length:	325mm
Weight (without camera):	4,5 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	2:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	146:1
Max.speed:	4m/min.
Horizontal traction force:	206 N
Operating temperature	-10°C to +50°C
Cameras module:	Easily changeable, different camera-modules available
Recomm. max.cable length:	90m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: **CMX-80F**, direct view + remote focus
PT-Z-80RF, Pan&Tilt + remote-focus

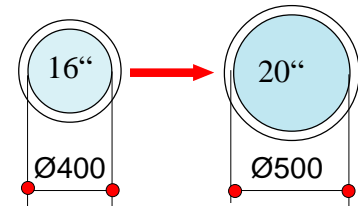
Available Control-units: **CUX10P** for X series
CUSX-10P for S,M+X series

Available cable reel: **CRX-30**



smaller tube bends upon request

Tube inside-diameter



variable adjustable

Changeable camera-modules



CMX-80RF



PTZ-80RF

Control-unit



CUX-7P

Cable reel



CARX-30

Data Sheet: X-Series



Crab-Robot

CRX-500/600

Technical specifications:

Min. diameter:	500mm (20")
Max. diameter:	600mm (24")
Length:	295mm
Weight (without camera):	4,5kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel machined
Transmission ratio:	2:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	146:1
Max.speed:	4m/min.
Horizontal traction force:	206 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	90m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: **CMX-80F**, direct view + remote focus

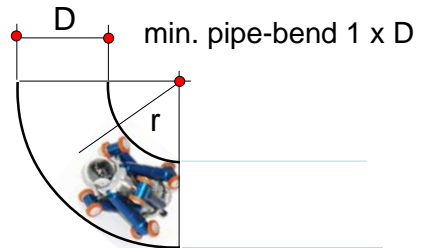
PT-Z-80RF, Pan&Tilt + remote-focus

Available Control-units: **CUX-10P** for X series

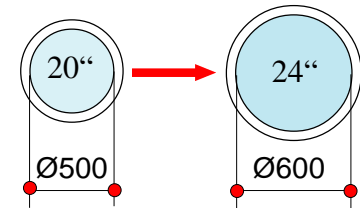
CUSX-10P for S,M+X series

Available cable reel:

CRX-30



Tube inside-diameter



variable adjustable

Changeable camera-modules



CMX-80RF



PTZ-80RF

Control-unit



CUX-7P

Cable reel



CARX-30

Data Sheet: X-Series



Crab-Robot

CRX-400/600

Technical specifications:

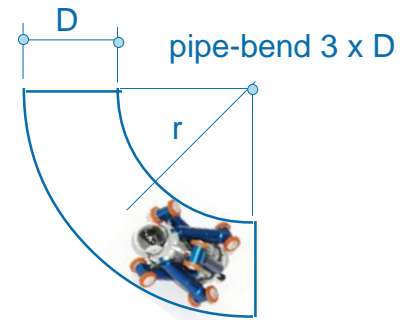
Min. diameter:	400mm (16")
Max. diameter:	600mm (24")
Length:	295mm
Weight (without camera):	3,8 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	3xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel milled
Transmission ratio:	2:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	146:1
Max.speed:	4m/min.
Horizontal traction force:	206 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	90m

The maximum cable length is dependent on number of pipe bends

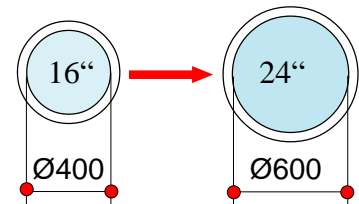
*Available camera-modules: **CMX-80F**, direct view + remote focus
PT-Z-80RF, Pan&Tilt + remote-focus*

*Available Control-units: **CUX10P** for X series
CUSX-10P for S,M+X series*

*Available cable reel: **CRX-30***



Tube inside-diameter



variable adjustable

Changeable camera-modules



CMX-80RF



PTZ-80RF

Control-units

CUSX-10P



CUX-10P



Cable reel



CARX-30

Data Sheet: X-Series



Crab-Robot CRX-500/650



Technical specifications:

Min. diameter:	500mm (16")
Max. diameter:	650mm (24")
Length:	430mm
Weight (without camera):	4,5 kg
Material:	Aluminium anodized
Watertight:	Splashproof
Spring shock absorbers:	3 - variable adjustable
Smallest tube bend:	1,5xd
Driven wheels:	12
Wheel diameter:	mm
Wheel material:	Nitrile rubber NBR - easily changeable
Right angle gear boxes:	6
Bevel gears:	12 - steel milled
Transmission ratio:	2:1
Ball bearings:	18
Micro-motors:	6
Voltage:	24VDC
Gearboxes:	6
Gear type:	Planetary gear
Transmission ratio:	146:1
Max.speed:	4m/min.
Horizontal traction force:	206 N
Operating temperature	-10°C to +50°C
Cameramodule:	Easily changeable, different camera-modules available
Recomm. max.cable length:	90m

The maximum cable length is dependent on number of pipe bends

Available camera-modules: **CMX-80F**, direct view + remote focus

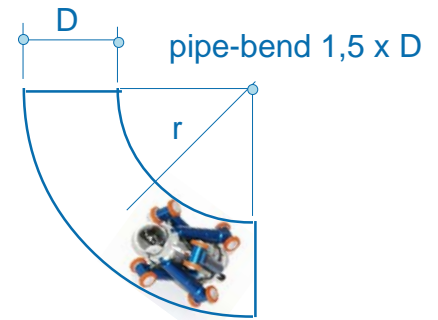
PT-Z-80RF, Pan&Tilt + remote-focus

Available Control-units: **CUX-10P** for S+M series

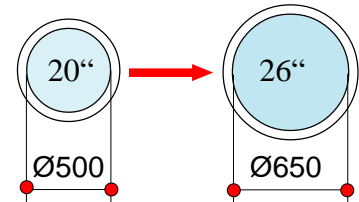
CUSX-10P for S,M+X series

Available cable reel:

CRX-30



Tube inside-diameter



variable adjustable

Changeable camera-modules



CMX-80RF



PTZ-80RF

Control-units

CUSX-10P



CUX-10P



Cable reel



CARX-30

Data Sheet: Pan&Tilt cameras



PTZ-80RF

Technical specifications:

Image-sensor	1/4" SONY Super HAD CCD
TV lines	480 TVL
Pixels	438.000
Minimum illumination	2,5 Lux/F2,2
Focus	Remote-Focus
Lens	4,2- 42 (10xZoom)
Ligthing system	10x4 (40) High intensity LED
Diameter	80mm
Shank diameter	40mm
Length	190mm
Weight	0,68 kg
Rotation	360° endless
Swivel	2x100°
Operating temperature	-10°C - +50°C

PT-55F

Technical specifications:

Image-sensor	1/2" SONY Super HAD CCD
TV lines	700 TVL
Pixels	438.000
Minimum illumination	2,5 Lux/F2,0
Focus	Fixfocus
FOV, field of view	150°
Ligthing system	16 High intensity LED
Diameter	37mm
Shank diameter	25mm
Length	150 mm
Weight	0,16 kg
Rotation	360° endless
Swivel	2x100°
Operating temperature	-10°C - +50°C

PT-35F

Technical specifications:

Image-sensor	1/2" SONY Super HAD CCD
TV lines	700 TVL
Pixels	438.000
Minimum illumination	2,5 Lux/F2,0
Focus	Fixfocus
FOV, field of view	150°
Ligthing system	16 High intensity LED
Diameter	37mm
Shank diameter	25mm
Length	150 mm
Weight	0,16 kg
Rotation	360° endless
Swivel	2x100°
Operating temperature	-10°C - +50°C

X - series



M - series



S - series



CM-50FF

Direct-view Cameramodule for Crab-Robot S+M-Series

Technical specifications ccd-camera

Image-sensor	1/4" SONY Super HAD CCD
TV lines	480 TVL
Pixels	438.000
Minimum illumination	2,0 Lux/F2,2
AES	1/50s - 1/100.000s
Lens	3,8mm / F2.2
Focus	Fixocus
Viewing angle	80°
Operating temperature	-10°C - +50°C
Lighting system	High intensity LED`s

S - series M - series



CMX-80RF

Direct-view Cameramodule for Crab-Robot X-Series

Technical specifications ccd-camera

Image-sensor	1/4" SONY Super HAD CCD
TV lines	480 TVL
Pixels	438.000
Minimum illumination	2,0 Lux/F2,2
AES	1/50s - 1/100.000s
Lens	3,8mm / F2.2
Focus	Remote-Focus
Viewing angle	80°
Operating temperature	-10°C - +50°C
Lighting system	High intensity LED`s

X - series



Data Sheet: Control-units



CUXS-7P



- 7" LCD Monitor
- 20-pin socket
Control-cable
- Speed control
- Joystick
Drive

XS - series only

Technical specifications:

Control-Unit	Suitable for XS-series only
Casing	portable PELI-case
Voltage	110V or 250V
Monitor	7" LCD-Monitor + DVR with SD-Card
Functions	Drive control
Dimensions	27 x 250 x 120mm
Weight	3kg

CUS-7P



Joystick
Drive

- 7" LCD Monitor
- 20-pin socket
Control-cable
- Speed control
- Joystick
Pan&Tilt

S M - series

Technical specifications:

Control-Unit	Suitable for S+M-series
Casing	portable PELI-case
Voltage	85-265V
Monitor	7" LCD-Monitor + DVR with SD-card
Functions	Drive control Speed control Pan&Tilt
Dimensions	486 x 392 x 192mm
Weight	8kg

CUX-7P



Joystick
DRIVE

- 7" LCD Monitor
- 20-pin socket
X-series
- Speed control
X- series
- Joystick
Pan&Tilt

X - series

Technical specifications:

Control-Unit	Suitable for X-series
Casing	portable PELI-case
Voltage	85-265V
Monitor	7" LCDMonitor + DVR with SD-card
Functions	Drive control X-series and S+M series Speed control Pan&Tilt Focus + Zoom
Dimensions	486 x 392 x 192mm
Weight	10 kg

CUSX-7P



Joystick
DRIVE
X-series
S+M series

- 7" LCD Monitor
- 20-pin socket
X-series
- Speed control
S+M- series
- Speed control
X- series
- Joystick
Pan&Tilt

S M X- series

Technical specifications:

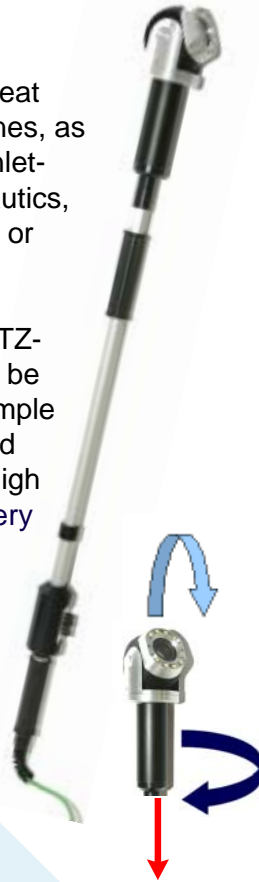
Control-Unit	Suitable for S,M+X-series
Casing	portable PELI-case
Voltage	85-265V
Monitor	7" LCDMonitor
Functions	2 x Drive control 2 x Speed control Pan&Tilt Focus + Zoom
Dimensions	486 x 392 x 192mm
Weight	11 kg

Touch-panel
Focus + Zoom

Data Sheet: P+T Camera-System



The new video inspection system PTZ-80RF is built up modularly and can be used for different applications. This system was designed especially for the following applications: Great cavities, tanks, vessels, engines and turbines, as well as for bridge- inspections. For small inlet-openings in the areas of assembly, aeronautics, space Industries, air conditioning Systems or special tasks for custom and police. All these checks can be carried out economically and optimally with the new PTZ-80RF. The new video inspection system can be attached to different control-units. The simple handling, the modular designed system and different video heads with an integrated high intensity LED illumination system, are very advisable.



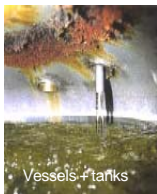
Sewage pipes



Security



Heat exchanger



Vessels - tanks

Applications

- * Centrifuges
- * Plant-constructions
- * Chemical Separators
- * Breweries and Diaries
- * Turbines and compressors
- * Chimney and fountain-shafts
- * Vessels and tanks with small openings
- * Cavities in bridge-and building constructions
- * Heavy accessibility machine-plants
- * Aerospace and aircraft-industry
- * Ship-, and car - engines
- * Air conditioning ducts
- * Reactor - vessels
- * Custom + Police
- * Power-plants
- * Vessels

Changeable Pan&Tilt camera module with LED Lighting



Telescoping rods:

- 2 x 60 cm
- 2 x 125 cm
- 2 x 150 cm
- 2 x 200 cm

CUX-10P



Technical specifications control-unit:

Portable Pelicase	
Voltage	230V
Monitor	10" LCD Monitor
Video/Image storage	DVR (optional)
Dimensions	405 x 330 x 174 mm
Weight	3,5 kg
Operating temp.	-10°C - +50°C

Control-unit



Technical specifications:

Diam.camera-head	80 mm
Image-sensor	1/4" SONY Super HAD CCD
TV lines	480 TVL
Pixels	438.000
Minimum illumination	2,5 Lux/F2,2
Focus	Autofocus
Lens	4,2- 42 (10xZoom)
Ligthning system	High intensity LED

PTZ-80RF



Technical specifications:

Diam.camera-head	39 mm
Image-sensor	1/4" SONY Super HAD CCD
TV lines	450 TVL
Pixels	438.000
Minimum illumination	2,0 Lux/F2,2
Focus	Fxfocus
Lens	2,7mm /F2,2
Ligthning system	High intensity LED

PT-35F

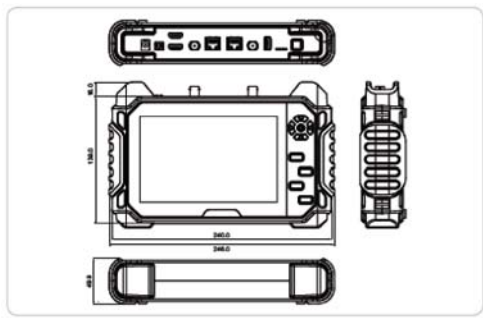


Data Sheet: Digital Recorder

Digital Video-Recorder (DVR) with Touch Screen + SD-Card for video recording and Snap-Shot

Features

- IPS 7 inch (1280x800) TFT-LCD Panel (LED Back Light) 7 inch wide and capacitive touch screen
 - Optical Bonding for convenient outdoor use -> Clear view under the direct rays of the sun, waterproof screen, dampproof, dustproof
 - Anti-finger coating for convenient use of the touch screen
 - Various Input signal: IP, HD/EX/3G-SDI, AHD, TVI, CVI, CVBS, HDMI
 - HDMI output port is provided.(1080p 60)
 - PoE (Max. 30W), PoC (Max. 10W)
 - PoC function is available for supported cameras only
 - Cable connection status check
 - Power supply to camera (Max. DC12V / 500mA)
 - Video recording, snapshot and playback is available.
 - ※ Supported file format : MP4 -> Playback is available on PC.
- 1) IP App : Auto Discovery, Camera Settings, Video view, Ping test, PTZ control, Snapshot, Record etc.
(Device Type : ONVIF, RTSP, MJPEG / Requested custom protocol addition is possible.)
 - 2) Viewer App : HD/EX/3G-SDI, AHD, TVI, CVI, CVBS, HDMI in
- RS-485 control (PELCO-D/P, Samsung, Panasonic, Lilin, Yann, etc.)
 - UTC (Up The Coax Communication) Function for AHD, TVI, CVI, CVBS.
 - Signal Level Meter, Focus Meter, CRC Check function for HD-SDI/3G-SDI/EX-SDI
 - Signal Level Meter, Focus Meter for AHD/TVI/CVI/CVBS (World 1st)
 - Support WIFI & Blue Tooth connection for wireless networking.



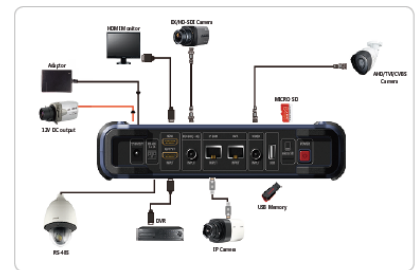
Specifications

	MODEL	SC-IPM07HD	
LCD	Display Resolution	1280(H) X (V) X 800(V)	
	Size	7 inch	
	Pixel Pitch	0.117mm(H) X 0.177mm(V)	
	Brightness (Cd)	400 Cd/m ²	
	Viewing Angle	89°(H) / 89°(V)	
	Response Time	11ms	
Video	Input	HDMI	~1080p 60
		HD-SDI	3.485Gbps~2.970Gbps
		HD Analog	AHD/TVI/CVI 1.0(720p) ; UTC
	Output	Analog	AHD/TVI/CVI 2.0(1080p)
		Analog	CVBS NTSC/PAL
		LAN	10/100Mbps - IP camera&PoE
Measurement	HD-SDI / HD Analog	S-Level Meter/Focus Meter	
		A-F Level Meter/ Focus Meter	
Power	Input	DC 12.6V(Exclusive Adaptor)	
	Output	± DC 12V 500mA (Power through)	
Battery		Li-Polymer: 11.1V, 2200mAh x 2	
Surge protection circuit (built-in)			
Temperature / Humidity		0°C ~ +50°C / 0% ~ 80%	
Case / Weight		PCABS/ 1kg	
Dimensions (mm)		246(W) X 160(H) X 40.9(D)	



DVR-HD-7SD-Touch

WiFi Dongle incl.



Adaptable to control-units



news

Portable Video-Inspection-System



Optional accessories:

CCTV Camera-System with reel



Crab-Robot units



Control-unit with 10" LCD - Monitor and Title generator

MCTG-50



Trolley



External metercounter



Built-in metercounter



Cable with Tungsten braid

The new video-inspection system is very powerful, portable and versatile. A sturdy collapsible trolley can be equipped with different control-units, cable drums and reels. All components are equipped with shock absorbers.

For mobile use, the individual systems can also be operated independently with high performance lithium batteries.