



CATALOG MARCH 2023 REV.00

INDUSTRIAL CCTV SYSTEMS

HIGH TEMPERATURE CAMERA SYSTEMS - FURNACE CAMERAS - WATER & AIR COOLED CAMERA HOUSING



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INDUSTRIAL CCTV SYSTEMS

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

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HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

cam^{tec}



+

sonda^{tec}



+

kit^{tec}



BASIC SYSTEM
COMPONENTS
CONFIGURATION

ADDITIONAL PROTECTION
DEVICES & CONTROL CABINET

*Depending of the application may be not required

+

ou^{tec}



or

in^{tec}



+

cab^{tec}



HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

Product code configuration table: IP based CAMTEC 1.0 version

camtec

2

1

X

A

B

C

D

E

Length [mm]

3 = 300

4 = 450

5 = 1000

7 = 700

Output signal /
Type of sleeve

A = IP Sondatec 1.0

Lens
(focal / inclination)

0 = 3,6 - 18 mm

1 = 6 mm

2 = 4 mm

3 = 2,8 mm

6 = 10 - 50 mm

V = 4 - 20 mm

Option

- = Thermostat

T = Temp. Sensor (PT100)

S = Temp. Sensor
(4-20 mA)**

E = Special version for
EAF applications

F = as model "E" +
Temp. Sensor (PT100)

G = as model "E" +
Temp. Sensor (4-20 mA)

N = M20 AISI316L
(No Temp. Sens.)

** "S-option" and "G-option" are not
available with version: L= 300 mm.

Specific version

P = PoE

D = Dual output
(IP+Analog)

When cameras require specific
versions (P, D, etc.), it will be added
a letter at the end of the code.

Easy fit all in one device



1.0

external
diameter:
101,6mm



MIL Std. multipolar
connector

Camera sensor with special
feature for high contrasts
and strong radiation

Optical lens with aperture
<3 mm diameter



LENS TYPE	VERTICAL ANGLE	HORIZONTAL ANGLE
2,8 mm	53°	89°
3,6 mm - 18 mm	44° - 8°	74° - 15°
4 mm - 20 mm	41° - 9°	72° - 17°
4 mm	39°	69°
6 mm	28°	47°
10 mm - 50 mm	18° - 3°	31° - 6°

Ref. "Angles of view Table_REV.2"

CAMERAS FOR HIGH TEMPERATURE VIDEO SYSTEMS - IP 1.0

CAM21X3A0T


Industrial IP camera CAMTEC 21X series with high temperature lens 3,6-18mm (Angles H: 74° - 15°, V: 44° - 8°) to be used inside SONDATEC 1.0. L=300mm, complete with sleeve and back flange with MIL-Std connector. 1/2,8" Sony Starvis IMX291 CMOS sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @F1,2. Configuration through web browser and PC (not included). Triple compression: MJPEG, H.264, H.265, H.265+. Power 12-24Vdc / 24Vac, <5W consumption. Complete with temperature sensor (PT100). PRICE INCLUDE ASSEMBLING, SETTING AND CUSTOM CONFIGURATION

CAM21X3A0

Industrial IP camera CAMTEC 21X series, as CAM21X3A0T complete with thermostat switch instead of PT100

CAM21X3A1T

Industrial IP camera CAMTEC 21X series, as CAM21X3A0T but with high temperature lens 6mm (Angles H: 47°, V: 28°)

CAM21X3A1TP

Industrial IP camera CAMTEC 21X series, as CAM21X3A1T with power PoE IEEE802.3af Class 2 instead of power 12-24Vdc / 24Vac

CAM21X3A2T

Industrial IP camera CAMTEC 21X series, as CAM21X3A0T but with high temperature lens 4mm (Angles H: 69°, V: 39°)

CAM21X3A3T

Industrial IP camera CAMTEC 21X series, as CAM21X3A0T but with high temperature lens 2,8mm (Angles H: 89°, V: 53°)

CAM21X3A6T

Industrial IP camera CAMTEC 21X series, as CAM21X3A0T but with high temperature lens 10-50mm (Angles H: 31°-6°, V: 18°-3°)

CAM21X3AVT

Industrial IP camera CAMTEC 21X series, as CAM21X3A0T but with high temperature lens 4-20mm (H=72°-17°, V=41°-9°)

CAM21X3AVTP

Industrial IP camera CAMTEC 21X, series as CAM21X3AVT with power PoE IEEE802.3af Class 2, instead of power 12-24Vdc / 24Vac

CAM21X3AVTD

Industrial IP camera CAMTEC 21X series, as CAM21X3AVT complete with additional output for analog signal (CVBS)

CAM21X3A0E


Industrial IP camera CAMTEC 21X "E" series for EAF applications with high temperature varifocal lens 3,6-18mm (Angles H: 74° - 15°, V: 44° - 8°) to be used inside SONDATEC 1.0. L=300mm, complete with sleeve and back flange with MIL-Std connector. 1/2,8" Sony Starvis IMX291 CMOS sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @F1,2. Configuration through web browser and PC (not included). Triple compression: MJPEG, H.264, H.265, H.265+. Power 12-24Vdc / 24Vac, <5W consumption. Complete with thermostat. PRICE INCLUDE ASSEMBLING, SETTING AND CUSTOM CONFIGURATION.

CAM21X3A0F

Industrial IP camera CAMTEC 21X "E" series, as CAM21X3A0E complete with temperature sensor (PT100) instead of thermostat switch

CAM21X3A6E

Industrial IP camera CAMTEC 21X "E" series, as CAM21X3A0E for EAF applications but with high temperature lens 10-50mm (Angles H: 31°-6°, V: 18°-3°)

CAM21X3A6F

Industrial IP camera CAMTEC 21X "E" series, as CAM21X3A6E complete with temperature sensor (PT100) instead of thermostat switch

CAM21X4A3SP


Industrial IP camera CAMTEC 21X series with high temperature lens 2,8mm (Angles H: 89°, V: 53°) to be used inside SONDATEC 1.0, L=450mm. 1/2,8" Sony Starvis IMX291 CMOS sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @F1,2. Configuration through web browser and PC (not included). Triple compression: MJPEG, H.264, H.265, H.265+. Power: PoE IEEE802.3af Class 2, <5W consumption. Supplied complete with temperature sensor 4-20mA. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING FOR THE CAMERA.

CAM21X7A0T



Industrial IP camera CAMTEC 21X series with high temperature varifocal lens 3,6-18mm (angolo H: 74°-15°, V: 44°-8°) to be used inside SONDATEC 1.0. L=700mm. 1/2,8" Sony Starvis IMX291 CMOS sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @F1,2. Configuration through web browser and PC (not included). Triple compression: MJPEG, H.264, H.265, H.265+. Power 12-24Vdc / 24Vac, <5W consumption. Complete with temperature sensor Pt100. PRICE INCLUDE ASSEMBLING, SETTING AND CUSTOM CONFIGURATION

CAM21X7A1T

Industrial IP camera CAMTEC 21X series, as CAM21X7A0T but with high temperature lens 6mm (Angles H: 47°, V: 28°)

CAM21X7A1S

Industrial IP camera CAMTEC 21X series, as CAM21X7A1T with temperature sensor 4-20mA instead of PT100

CAM21X7A3T

Industrial IP camera CAMTEC 21X series, as CAM21X7A0T but with high temperature lens 2,8mm (Angles H: 89°, V: 53°)

CAM21X7A3S

Industrial IP camera CAMTEC 21X series, as CAM21X7A3T with temperature sensor 4-20mA instead of PT100

CAM21X7AVT

Industrial IP camera CAMTEC 21X series, as CAM21X7A0T but with high temperature varifocal lens 4-20mm (^H=72°-17°, ^V=41°-9°)

CAM21X7AVS



Industrial IP camera CAMTEC 21X series, as CAM21X7A0T but with high temperature varifocal lens 4-20mm (^H=72°-17°, ^V=41°-9°)

CAM12X3F1T



Industrial IP Full HD camera (Camera Body Bosch NBN-50022-C UL listed) with high temperature lens 6mm (angles of view approx: H=48°, V=29°) to be used with SONDATEC 1.0, L=300mm. 1/2,7" CMOS sensor, with 1920x1080 resolution. Frame rate up to 30fps@max resolution. Image settings available for high contrast and brightness background as furnace, boiler, high temperature process. Removable IR cut filter for low light application also. Multiple configurable streaming H.264 and M-JPEG. Configuration through Web browser and PC (not included). Power 12Vdc. Complete with temperature sensor Pt100. PRICE INCLUDE ASSEMBLING, SETTING AND CUSTOM CONFIGURATION.

CAM12X3F2T

CAM12X3F0E



Industrial IP Full HD camera, as CAM12X3F1T but with high temperature lens 4mm (angles of view: ^H=83°, ^V=46°)

Industrial IP Full HD camera "E" series for EAF applications (Camera Body Bosch NBN-50022-C UL listed) with ADJUSTABLE high temperature lens 3,6-18mm (angle of view approx: H=74°-15°, V=44°-8°) to be used with SONDATEC 1.0, L=300mm. 1/2,7" CMOS sensor, with 1920x1080 resolution. Frame rate up to 30fps@max resolution. Image settings available for high contrast and brightness background as furnace, boiler, high temperature process. Removable IR cut filter for low light application also. Multiple configurable streaming H.264 and M-JPEG. Configuration through Web browser and PC (not included). Power supply: 12Vdc or 24Vdc. Provided with thermostat switch with over temperature alarm. PRICE INCLUDE ASSEMBLING, SETTING AND CUSTOM CONFIGURATION

CAM12X3F6E

CAM12X3F6F

CAM12X7F0T



Industrial IP Full HD camera "E" series, as CAM12X3F0E but with high temperature ADJUSTABLE high temperature lens 10-50mm (angle of view approx: H=31°-6°, V=19°-3°)

Industrial IP Full HD camera "E" series, as CAM12X3F6E with temperature sensor (PT100) instead of thermostat switch

Industrial IP Full HD camera with ADJUSTABLE high temperature lens 3,6-18mm (angle of view approx: H=74°-15°, V=44°-8°) to be used with SONDATEC 1.0, L=700mm. 1/2,7" CMOS sensor, with 1920x1080 resolution. Frame rate up to 30fps@max resolution. Image settings available for high contrast and brightness background as furnace, boiler, high temperature process. Removable IR cut filter for low light application also. Multiple configurable streaming H.264 and M-JPEG. Configuration through Web browser and PC (not included). Power 12Vdc or PoE (48VDC nominal). Complete with temperature sensor PT100. PRICE INCLUDE ASSEMBLING, SETTING AND CUSTOM CONFIGURATION

CAM12X7F0

CAM12X7F0S

CAM12X7F2T

CAM12X7F2

Industrial IP Full HD camera, as CAM12X7F0T with thermostat switch instead of temperature sensor (PT100)

Industrial IP Full HD camera, as CAM12X7F0T with temperature sensor 4-20mA instead of temperature sensor (PT100)

Industrial IP Full HD camera (powered by Bosch NBN-50022-C) as CAM12X7F0T but with high temperature lens 4mm (^H= 83°, ^V= 46°)

Industrial IP Full HD camera, as CAM12X7F2T with thermostat switch instead of temperature sensor (PT100)

LENS TYPE	VERTICAL ANGLE	HORIZONTAL ANGLE
2,8 mm	63°	101°
3,6 mm - 18 mm	48° - 11°	85° - 18°
4 mm - 20 mm		
4 mm	46°	83°
6 mm	29°	48°
10 mm - 50 mm	19° - 3°	34° - 5°

Ref. "CAMTEC 12X SERIES WITH BOSCH CAMERA - ANGLES OF VIEW_ Rev.00", dated 01/12/2021

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

Product code configuration table: IP based CAMTEC 2.0 version

camtec

2 1 X

2 1 X A B C D

A	Length [mm]
1	1200
2	3000
3	300
4	4000
5	1000
6	1600
7	700

B	Output signal / Type of sleeve
D	IP Sondatec 2.0

C	Lens (focal / inclination)
0	3,6 - 18 mm
1	6 mm
2	4 mm
3	2,8 mm
6	10 - 50 mm
V	4 - 20 mm
B	3,3 mm / 45°
C	3,3 mm / 60°; fov: up/bottom
D	3,3 mm / 60°; fov: left/right

D	Option
-	Thermostat
T	Temp. Sensor (PT100)
S	Temp. Sensor (4-20 mA)**
E	Special version for EAF applications
F	as model "E" + Temp. Sensor (PT100)
G	as model "E" + Temp. Sensor (4-20 mA)
N	M20 AISI316L (No Temp. Sens.)

E	Specific version
P	PoE
D	Dual output (IP+Analog)

When cameras require specific versions (P, D, etc.), it will be added a letter at the end of the code.

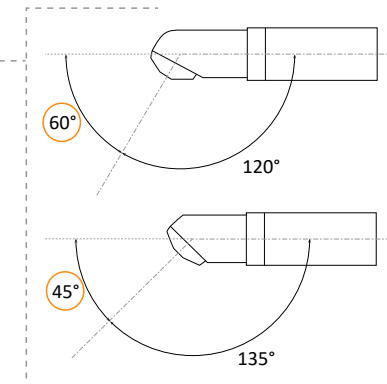
LENS TYPE	VERTICAL ANGLE	HORIZONTAL ANGLE
2,8 mm	53°	89°
3,6 mm - 18 mm	44° - 8°	74° - 15°
4 mm - 20 mm	41° - 9°	72° - 17°
4 mm	39°	69°
6 mm	28°	47°
10 mm - 50 mm	18° - 3°	31° - 6°
3,3 mm axial	45°	73°
3,3 mm inclined	46°	72°

Ref. "Angles of view Table_REV.2"

Easy fit all in one device

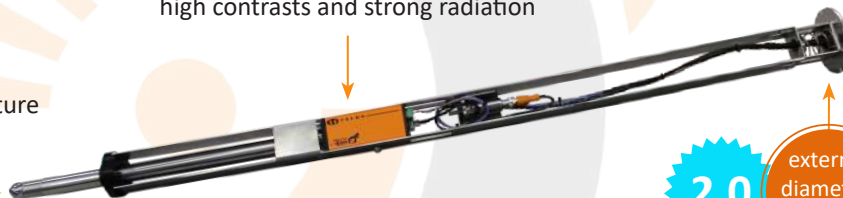


MIL Std. multipolar connector



Camera sensor with special feature for high contrasts and strong radiation

Optical lens with aperture <3 mm diameter



2.0

external diameter: 88,9mm

CAMERAS FOR HIGH TEMPERATURE VIDEO SYSTEMS - IP 2.0

CAM21X1DDT



Industrial IP camera CAMTEC 21X series with high temperature 60° inclined lens ($\angle H=72^\circ$, $\angle V=46^\circ$), field of vision left/right. To be used inside SONDATEC 2.0 length 1200mm. 1/2,8" progressive CMOS Sony Starvis IMX291 sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @ F1,2. Configuration through web browser and PC (not included). Video compression: H.265+/H.265/H.264/MJPEG. Power 12Vdc, <5W consumption. Provided with temperature sensor (PT100). PRICE INCLUDE ASSEMBLING; SETTING AND CUSTOM CONFIGURATION

CAM21X1DDS

Industrial IP camera CAMTEC 21X series as CAM21X1DDT with temperature sensor (4-20mA) instead of PT100

CAM21X1DDSD

Industrial IP camera CAMTEC 21X series DUAL OUTPUT version as CAM21X1DDS with an additional output for analog signal (CVBS)

CAM21X1DBT

Industrial IP camera CAMTEC 21X series as CAM21X1DDT with high temperature 45° inclined lens ($\angle H=72^\circ$, $\angle V=46^\circ$)

CAM21X2DDT

Industrial IP camera CAMTEC 21X series as CAM21X1DDT but with length=3000mm

CAM21X2DCT

Industrial IP camera CAMTEC 21X series as CAM21X2DDT but with field of vision: up/bottom

CAM21X3D0



Industrial IP camera CAMTEC 21X series with adjustable high temperature lens 3,6-18mm ($\angle H: 74-15^\circ$, $\angle V: 44-8^\circ$) to be used inside SONDATEC 2.0, length: 300mm. 1/2,8" progressive CMOS Sony Starvis IMX291 sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @ F1,2. Configuration through web browser and PC (not included). Video compression: H.265+/H.265/H.264/MJPEG. Power supply: 12-24Vdc / 24Vac, <5W consumption. PRICE INCLUDE ASSEMBLING; SETTING AND CUSTOM CONFIGURATION

CAM21X3DV

Industrial IP camera CAMTEC 21X series come CAM21X3D0 but with adjustable high temperature lens 4-20mm ($\angle H=72^\circ-17^\circ$, $\angle V=41^\circ-9^\circ$)

CAM21X3DVT

Industrial IP camera CAMTEC 21X series as CAM21X3DV with temperature sensor (PT100) instead of thermostat switch

CAM21X3D2T

Industrial IP camera CAMTEC 21X series with high temperature lens 4mm (Angles H: 69° , V: 39°) to be used inside SONDATEC 2.0. L=300mm, complete with sleeve and back flange with MIL-Std connector. 1/2,8" Sony Starvis IMX291 CMOS sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @ F1,2. Configuration through web browser and PC (not included). Triple compression: MJPEG, H.264, H.265, H.265+. Power 12-24Vdc / 24Vac, <5W consumption. Complete with temperature sensor (PT100). PRICE INCLUDE ASSEMBLING, SETTING AND CUSTOM CONFIGURATION

CAM21X3D6T

Industrial IP camera CAMTEC 21X series as CAM21X3D2T but with adjustable high temperature lens 10-50mm ($\angle H: 31-6^\circ$, $\angle V: 18-3^\circ$)

CAM21X3D6TP

Industrial IP camera CAMTEC 21X series as CAM21X3D6T with power: POE IEEE 802.3af Class2, <5W consumption instead of power 12-24Vdc / 24Vac

CAM21X4DD



Industrial IP camera CAMTEC 21X series with high temperature 60° inclined lens ($\angle H=72^\circ$, $\angle V=46^\circ$), field of vision left/right. To be used inside SONDATEC 2.0 length 1200mm. 1/2,8" progressive CMOS Sony Starvis IMX291 sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @ F1,2. Configuration through web browser and PC (not included). Video compression: H.265+/H.265/H.264/MJPEG. Power 12Vdc, <5W consumption. Complete with overtemperature alarm thermostat. PRICE INCLUDE ASSEMBLING; SETTING AND CUSTOM CONFIGURATION

CAM21X4DDT

Industrial IP camera CAMTEC 21X series as CAM21X4DD but with temperature sensor PT100 instead of thermostat switch

CAM21X5DCS

Industrial IP camera CAMTEC 21X series with high temperature 60° inclined lens ($\angle H=72^\circ$, $\angle V=46^\circ$), field of vision up/bottom. To be used inside SONDATEC 2.0 length 1000mm. 1/2,8" progressive CMOS Sony Starvis IMX291 sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @ F1,2. Configuration through web browser and PC (not included). Video compression: H.265+/H.265/H.264/MJPEG. Power 12-24Vdc / 24Vac, <5W consumption. Provided with temperature sensor (4-20mA). PRICE INCLUDE ASSEMBLING; SETTING AND CUSTOM CONFIGURATION

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

Product code configuration table: ANALOG CAMTEC 1.0 and 2.0 version

camtec

2

1

X

A

B

C

Length [mm]

1 = 1200

2 = 3000

3 = 300

4 = 4000

5 = 1000

6 = 1600

7 = 700

Output signal /
Type of sleeve

M = CVBS type for
Sondatec 1.0

7 = CVBS type for
Sondatec 2.0

Lens
(focal / inclination)

0 = 3,6 - 18 mm

1 = 6 mm

2 = 4 mm

3 = 2,8 mm

6 = 10 - 50 mm

V = 4 - 20 mm

DUAL Output available:

CVBS 16:9 ratio + IP stream simultaneously

NEW



Version with high
temperature frontal
glass (CAM12F106)



MIL Std. multipolar connector

1.0

Ø
101,6mm

2.0

Ø
88,9mm

LENS TYPE	VERTICAL ANGLE	HORIZONTAL ANGLE
2,8 mm	53°	89°
3,6 mm - 18 mm	44° - 8°	74° - 15°
4 mm - 20 mm	41° - 9°	72° - 17°
4 mm	39°	69°
6 mm	28°	47°
10 mm - 50 mm	18° - 3°	31° - 6°

Ref. "Angles of view Table_REV.2"

CAMERAS FOR HIGH TEMPERATURE VIDEO SYSTEMS - ANALOG TYPE

1.0

CAM21X3M0



Industrial analog camera CAM21X series with high temperature varifocal lens 3,6-18mm ($\Delta H=74^{\circ}-15^{\circ}$, $\Delta V=44^{\circ}-8^{\circ}$) designed for SONDATEC 1.0 housing, length=300mm. Sony Starvis IMX291 CMOS 1/2.8" 1000 HTVL sensor. Minimum Illumination: 0.001Lux @ F1.2. Specific image adjustments for applications with high contrasts, and the presence of irradiation for infrared light, via web browser and PC (not included). Triple image encoding, with MJPEG, H.264, H.265, H.265 + compression algorithms. Power supply: 12-24Vdc / 24Vac, consumption <5W. Complete with thermostat switch. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING OF THE CAMERA

CAM21X3M1

Industrial analog camera CAMTEC 21X series, as CAM21X3M0 but with high temperature lens 6mm ($\Delta H=47^{\circ}$, $\Delta V=28^{\circ}$)

CAM21X3M1T

Industrial analog camera CAMTEC 21X series, as CAM21X3M0 with temperature sensor Pt100 instead of thermostat switch

CAM21X3M2

Industrial analog camera CAMTEC 21X series, as CAM21X3M0 but with high temperature varifocal lens 4mm ($\Delta H=69^{\circ}$, $\Delta V=39^{\circ}$)

CAM21X3M2T

Industrial analog camera CAMTEC 21X series, as CAM21X3M2 with temperature sensor Pt100 instead of thermostat switch

CAM21X3M6

Industrial camera applications as CAM21X3M0 but with varifocal lens 10-50mm ($\Delta H=31^{\circ}-6^{\circ}$, $\Delta V=18^{\circ}-3^{\circ}$)

CAM21X3M6E



Industrial camera applications "E" series for EAF applications with varifocal lens 10-50mm ($\Delta H=31^{\circ}-6^{\circ}$, $\Delta V=18^{\circ}-3^{\circ}$) designed for SONDATEC 1.0 housing, length=300mm. Sensore Sony Starvis IMX291 CMOS 1/2.8" 1000 HTVL, Wide Dynamic Range specified for applications. Minimum illumination 0.001Lux. Video output: CVBS (16:9 ratio). Configuration of parameters through portable monitor (optional), RS-485 protocol. Standard PAL-NTSC selectable. Power supply: 12Vdc. Complete with thermostat switch. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING OF THE CAMERA

CAM21X7M0



Industrial camera applications with high temperature varifocal lens 3,6-18mm ($\Delta H=74^{\circ}-15^{\circ}$, $\Delta V=44^{\circ}-8^{\circ}$) designed for SONDATEC 1.0 housing, length=700mm. Sony Starvis IMX291 CMOS 1/2.8" 1000 HTVL sensor. Minimum Illumination: 0.001Lux @ F1.2. Specific image adjustments for applications with high contrasts, and the presence of irradiation for infrared light, via web browser and PC (not included). Triple image encoding, with MJPEG, H.264, H.265, H.265 + compression algorithms. Power supply: 12-24Vdc / 24Vac, consumption <5W. Complete with thermostat. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING OF THE CAMERA.

CAM21X7MVT

Industrial camera applications as CAM21X7M0 with high temperature varifocal lens 4-20 mm ($\Delta H=72^{\circ}-17^{\circ}$, $\Delta V=41^{\circ}-9^{\circ}$) and complete with PT100 temperature sensor

CAM21X372



Industrial analog camera 21X series with high temperature lens 4mm ($\Delta H=69^{\circ}$, $\Delta V=39^{\circ}$), to be used with SONDATEC 2.0, L=300mm, complete with sleeve and back flange with MIL-Std connector. 1/2.8" Sony Starvis IMX291 CMOS sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @F1.2. Configuration through web browser and PC (not included). Power supply: 12-24Vdc / 24 Vac, consumption: <5W. Complete with alarm thermostat for overheating. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING OF THE CAMERA.

2.0

CAM21X372T

Industrial analog camera CAM21X as CAM21X372 but complete with temperature sensor PT100 instead of alarm thermostat

CAM21X771



Industrial analog camera CAMTEC 21X series with high temperature lens 6 mm ($\Delta H: 47^{\circ}$, $V: 28^{\circ}$) to be used inside SONDATEC 2.0 length 700mm. 1/2.8" progressive CMOS Sony Starvis IMX291 sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @F1.2. Configuration through web browser and PC (not included). Video compression: H.265+/H.265/H.264/MJPEG. Power supply: 12-24Vdc / 24Vac, <5W consumption. PRICE INCLUDE ASSEMBLING; SETTING AND CUSTOM CONFIGURATION.

CAM12F001

CAM12F002

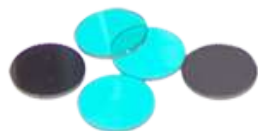
CAM12F101

CAM12F102

CAM12F103

CAM12F104

CAM12F106



Optic filter BG18 Ø12, thickness 1mm, for infrared rays

Optic filter BG18 Ø19, thickness 1mm, for infrared rays

Optic filter NEUTRAL DENSITY NG9 Ø12 mm for high brightness lens 2,8mm, 4mm, 6mm, 10mm

Optic filter NEUTRAL DENSITY NG9 Ø19 th. 1mm for high brightness lens

Optic filter NEUTRAL DENSITY NG9 for high brightness for varifocal PIN-HOLE lens, Ø16 thickness 1mm

Optical filter for varifocal PIN-HOLE lens type BG18 Ø16 thickness 1mm for cut infrared light

Frontal glass sapphire Heat resistant and Heat reflecting Diam. 22 mm thickness 1 mm



ACCESSORIES & SPARE PARTS

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

Product code configuration table: SONDATEC 1.0 version

sonda^{tec}

0

1

X

A

Length [mm]

0 = 1000

1 = 1200

3 = 300

4 = 4000

6 = 1600

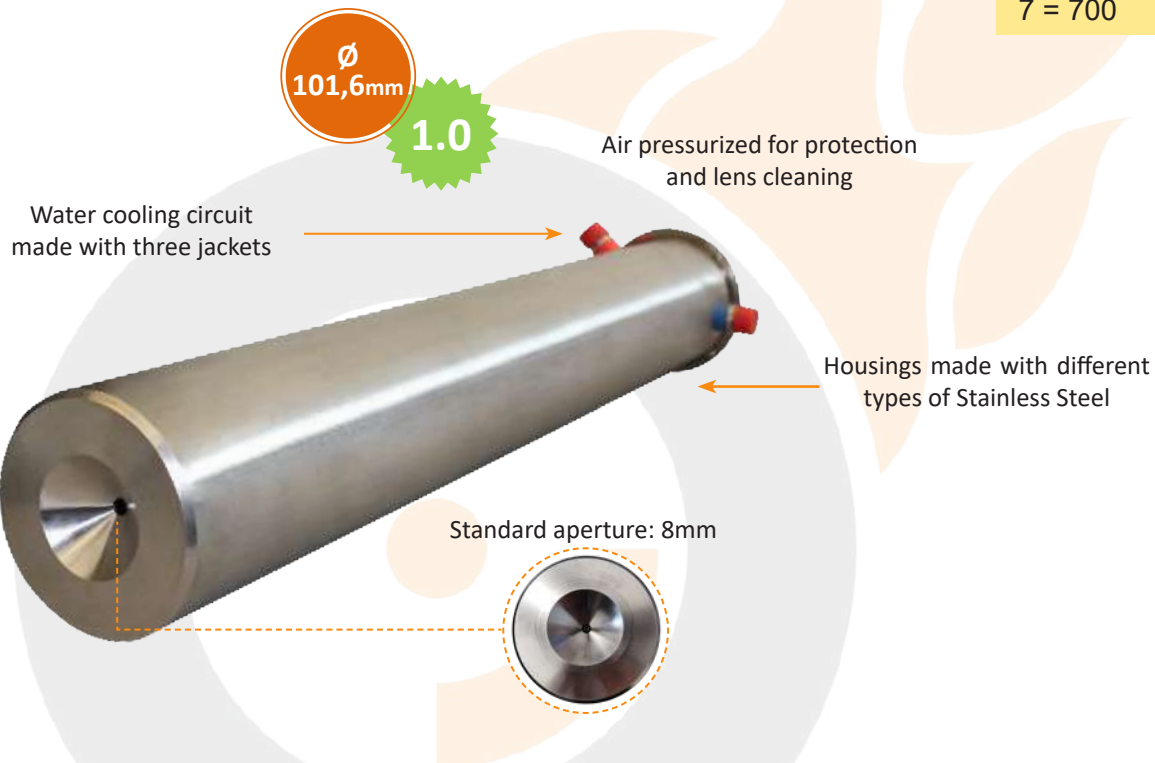
7 = 700

B

C

Different versions depending on diagonal angle of view, material, air & water connections.

0 1 X A B C



- Water & Air cooled pressurized housings
- Employment of industrial parts
- Up to 2200°C

HIGH TEMPERATURE VISION SYSTEMS

SON01X301



Housing SONDATEC 1.0 for CAMTEC cameras, designed for continuous operation with high temperature up to 2200°C, water and air cooled. Straight vision allows to use up to 105° diagonal angle of view lenses. Made by stainless steel AISI316L (On request available version in AISI310S). Diameter: 101,6mm, length: 300mm. Complete with back cover ready for KITTEC connection series. Air inlet 3/8"M-BSPP, water inlet/outlet 1/2"M-BSPP

SON01X301_F

SON01X302

Housing SONDATEC 1.0 for CAMTEC cameras as SON01X301 supplied version with welded flange to be specified in the order

Housing SONDATEC 1.0 for CAMTEC cameras as SON01X301 supplied with flange for coupling to the VOD or similar applications (square flange)

SON01X310



Housing SONDATECplus 1.0 with "BALL" fixing plate, for camera CAMTEC for working up to 2200°C, water and air compressed cooled. Axial vision, for lens up to 32° diagonal angle of view. Made by stainless steel AISI316L, diameter: 101,6mm, length: 415mm. Complete with bottom cover for KITTEC series tube and multipolar connector MIL STD. Air and water fitting as 1/2"gas M-BSPP

SON01X30C

Housing SONDATEC designed for continuous operation with high temperature up to 2200°C, cooled by water and compressed air. Axial vision, for lens up to 105° diagonal angle of view. Made by stainless steel AISI316L. Length: 350mm. Customized version realized for Customer camera and built-in PC containment

SON01X701



Housing SONDATEC 1.0 for CAMTEC cameras, designed for continuous operation with high temperature up to 2200°C, water and air cooled. Straight vision allows to use up to 105° diagonal angle of view lenses. Made by stainless steel AISI316L (On request available version in AISI310S). Diameter: 101,6mm, length: 700mm. Complete with back cover ready for KITTEC connection series. Air inlet 3/8"M-BSPP, water inlet/outlet 1/2"M-BSPP

SON01X701_F

SON01X705

SON01X711

SON01X702



Housing SONDATEC 1.0 for CAMTEC cameras as SON01X701 supplied version with welded flange to be specified in the order

Housing SONDATEC 1.0 for CAMTEC cameras as SON01X701 supplied with water inlet/outlet: 3/4"M-BSPP

Housing SONDATEC 1.0 for CAMTEC cameras as SON01X701 but made by stainless steel HASTELLOY C276

Housing SONDATEC 1.0 for CAMTEC cameras as SON01X701 supplied with flange for coupling to the VOD or similar applications (square flange)

SON01X708

SON01X706

SON01X704



Housing SONDATEC 1.0 for CAMTEC cameras as SON01X702 supplied with water inlet/outlet: 3/4"M-BSPP

Housing SONDATEC 1.0 for CAMTEC cameras as SON01X702 supplied with Air inlet 1/2"F-NPT, water inlet/outlet 1/2"F-NPT

Housing SONDATEC 1.0 for CAMTEC cameras as SON01X701 supplied with flange for coupling to the VOD or similar applications. Supplied with flange DN300, thickness 20mm AISI304

SON01F010

SON01F040

SON01F016

07G003A1

SON01F015

T6610

SON01H001

SON01F070

SON01F080

SON01F090



Mechanical flange for matching SONDATEC 1.0 to OUTEC or furnace wall. Made by stainless steel AISI304L. Diameter= 101,6mm

Mechanical flange for matching SONDATEC 2.0 to OUTEC, or SONDATEC direct to furnace wall with 3 fixing points. Made by stainless steel

Mechanical flange for matching SON01X30A to OUTEC or furnace wall. Made by stainless steel AISI304L. Diameter= 101,6mm

Fixing cot for Sondatec 1.0 realized in AISI304

Flange for direct coupling to SONDATEC 1.0 housing to ensure greater protection from radiation. Outside diameter = 200mm. Made of AISI316L stainless steel

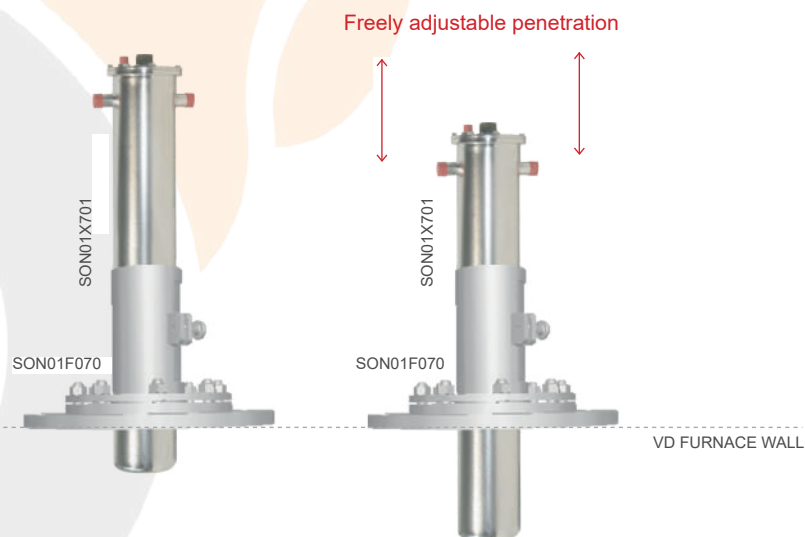
Gasket d.e. 122mm d.i. 102mm with 10x10mm section. For temperatures up to 300 ° C. Made with yarns based on Pre-oxidized Polyacrylonitrile (PAN) fibers, without adding binders or mineral charges. Suitable for use with SONDATEC 1.0

Wall mounting bracket with 3 swivel joints for 3-axis adjustment for manual SONDATEC introduction. Made with stainless steel INOX AISI304

Vacuum flange with pressure ring complete with probe quick release mechanism, suitable for matching Sondatec 1.0 to furnace wall. Interfaceable with flange version Standard PN10 DN250, external diameter: 395mm (UNI EN 1092-1). Entirely made in AISI304

Vacuum flange with pressure ring complete with probe quick release mechanism, suitable for matching Sondatec 1.0 to furnace wall. Entirely made in AISI304. Interfaceable with version flange std PN10 DN300, external diameter: 445mm (UNI EN 1092-1)

Vacuum flange with pressure ring complete with probe quick release mechanism, suitable for matching Sondatec 1.0 to furnace wall. Entirely made in AISI304. Suitable to be welded directly on furnace/boiler wall. External diameter: 285mm



HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

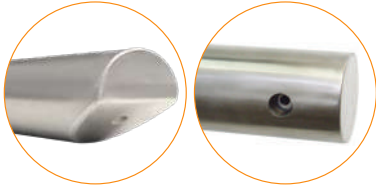
Product code configuration table: SONDATEC 2.0 version

sonda^{tec}



- Water & Air cooled pressurized housings
- Air pressurized for protection and lens cleaning
- Employment of industrial parts
- Up to 2200°C

Different angle of view available

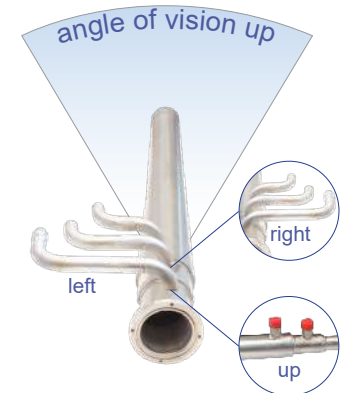
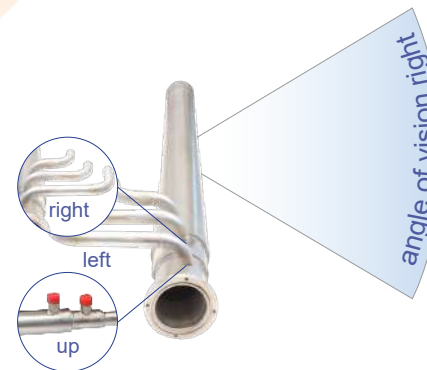
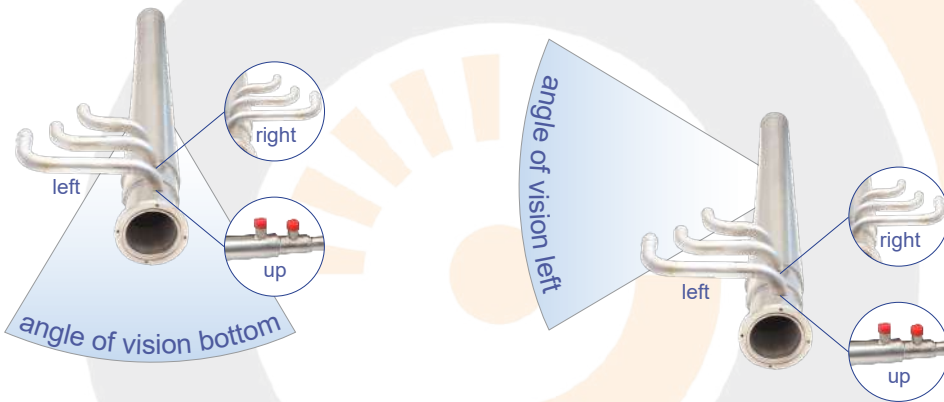


Water cooling circuit
made with three jackets

Housings made with different
types of Stainless Steel

2.0

Ø
88,9mm



HIGH TEMPERATURE VISION SYSTEMS

SON01X061



Housing SONDATEC 2.0 for cameras CAM21X0DC series, designed for continuous operation with high temperatures up to 2200°C, water and air cooled. Angle of sonda inclination 120°, it allows to use lens up to 85° diagonal angle of view. Field of vision: BOTTOM. Made by Stainless Steel AISI316L (on request available version in AISI310S). Diameter 89 mm (Version 2.0), length 1000 mm. Connections for air and water placed on the left (back view). Water fitting 1/2" M-BSPP, 60° flared. Air 3/8" M-BSPP

SON01X063

Housing SONDATEC 2.0 as SON01X061 for cameras CAM21X0DD with field of vision: LEFT

SON01X065

Housing SONDATEC 2.0 as SON01X061 for cameras CAM21X0DD with field of vision: RIGHT

SON01X069

Housing SONDATEC 2.0 as SON01X061 with field of vision: UP. Connections for air and water placed on the top, straight type

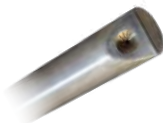
SON01X06A

Housing SONDATEC 2.0 as SON01X061 but with connections for air and water placed on the top, straight type

SON01X06A_F

Housing SONDATEC 2.0 for CAMTEC cameras as SON01X06A supplied version with welded flange to be specified in the order

SON01X145



Housing SONDATEC 2.0 for cameras CAM21X1DB- series, designed for continuous operation with high temperatures up to 2200°C, water and air cooled. Angle of sonda inclination 135°, it allows to use lens up to 85° diagonal angle of view. Field of vision: RIGHT. Made by Stainless Steel AISI316L (on request available version in AISI310S). Diameter 89 mm (Version 2.0), length 1200 mm. Connections for air and water placed on the left. Water fitting 1/2" M-BSPP, 60° flared. Air 3/8" M-BSPP

SON01X14A

Housing SONDATEC 2.0 as SON01X145 with field of vision: BOTTOM. Connections for air and water on the top, straight type

SON01X161



Housing SONDATEC 2.0 for cameras CAM21X1DC series, designed for continuous operation with high temperatures up to 2200°C, water and air cooled. Angle of sonda inclination 120°, it allows to use lens up to 85° diagonal angle of view. Field of vision: BOTTOM. Made by Stainless Steel AISI316L (on request available version in AISI310S). Diameter 89 mm (Version 2.0), length 1200 mm. Connections for air and water placed on the left (back view). Water fitting 1/2" M-BSPP, 60° flared. Air 3/8" M-BSPP

SON01X163

Housing SONDATEC 2.0 as SON01X161 for cameras CAM21X1DD with field of vision: LEFT

SON01X163H

Housing SONDATEC 2.0 as SON01X163 but made by stainless steel HASTELLOY C276

SON01X164

Housing SONDATEC 2.0 as SON01X161 for CAM21X1DD with field of vision: LEFT. Connections for air and water on the right

SON01X165

Housing SONDATEC 2.0 as SON01X161 for cameras CAM21X1DD with field of vision: RIGHT

SON01X166

Housing SONDATEC 2.0 as SON01X161 for cameras CAM21X1DD with field of vision: RIGHT. Connections for air and water placed on the right

SON01X167

Housing SONDATEC 2.0 as SON01X161 with field of vision: UP. Connections for air and water placed on the left

SON01X16A

Housing SONDATEC 2.0 as SON01X161 with connections for air and water placed on the top, straight type

SON01X16A_F

Housing SONDATEC 2.0 as SON01X16A supplied version with welded flange to be specified in the order

SON01X16B

Housing SONDATEC 2.0 as SON01X161 for CAM21X1DD with field of vision: LEFT. Connections for air and water placed on the top, straight type

SON01X16B_F

Housing SONDATEC 2.0 as SON01X16B supplied version with welded flange to be specified in the order

SON01X16C

Housing SONDATEC 2.0 as SON01X161 for cameras CAM21X1DD with field of vision: RIGHT. Connections for air and water placed on the top, straight type

SON01X16C_F

Housing SONDATEC 2.0 as SON01X16C supplied version with welded flange to be specified in the order

SON01X76A

Housing SONDATEC 2.0 for cameras CAM21X7DC series, designed for continuous operation with high temperatures up to 2200°C, water and air cooled. Angle of sonda inclination 120°, it allows to use lens up to 85° diagonal angle of view. Field of vision: BOTTOM. Made by Stainless Steel AISI316L (on request available version in AISI310S). Diameter 89 mm (Version 2.0), length 700 mm. Connections for air and water placed on the top, straight type. Water fitting 1/2" M-BSPP, 60° flared. Air 3/8" M-BSPP.

SON01X76B

Housing SONDATEC 2.0 for cameras CAM21X7DD series, designed for continuous operation with high temperatures up to 2200°C, water and air cooled. Angle of sonda inclination 120°, it allows to use lens up to 85° diagonal angle of view. Field of vision: LEFT. Made by Stainless Steel AISI316L (on request available version in AISI310S). Diameter 89 mm (Version 2.0), length 700 mm. Connections for air and water placed on the top, straight type. Water fitting 1/2" M-BSPP, 60° flared. Air 3/8" M-BSPP.

HIGH TEMPERATURE VISION SYSTEMS - INCLINED SONDATEC 2.0

SON01X36B0

Vision system for TOP-ROLL consisting of a SondaTec cooled housing with "TRIPLE JACKET", length 3000mm, designed for CAMTEC series cameras with 60° inclined vision, view: LEFT side. Outer sheath made of AISI316L stainless steel, 89mm diameter. Electrical signal connection by MIL-STD multipolar circular connector. Air and water inlet connections on upper side: water 1/2" M-BSPP, nitrogen 3/8" M-BSPP. The product will be supplied fully assembled and tested with a 10 Bar/24 hour pressure seal test

SON01X36C0

Vision system for TOP-ROLL as SON01X36B0 but with field of view: RIGHT.

SON01X36D0

Vision system for TOP-ROLL as SON01X36B0 but with inclined vision, view: BOTTOM.

SON01X46B0

Vision system for TOP-ROLL as SON01X36B0 but length 4000mm

SON01X46C0

Vision system for TOP-ROLL as SON01X46B0 but with field of view: RIGHT.

SON01X46B1

Vision system for TOP-ROLL as SON01X46B0 but insulated version with outer sheath made of AISI304 stainless steel, 101,6 mm diameter

SON01X46C1

Vision system for TOP-ROLL as SON01X46C0 but insulated version with outer sheath made of AISI304 stainless steel, 101,6 mm diameter

HIGH TEMPERATURE VISION SYSTEMS - TOP ROLL

SON01X330

Housing 2.0 for camera CAMTEC for working up to 1500°C, water and air compressed cooled. Axial vision, for lens up to 105° diagonal angle of view. Made by stainless steel AISI316L, 89mm, 350mm length. Water fitting as 1/2" M-BSPP, air 3/8" M-BSPP

SON01X340

Housing SONDATEC 2.0 as SON01X330 but with special version for direct coupling to burner visual spy

SON01X703

SONDATEC 2.0 cooled housing for our high temperature camera series CAMTEC. Designed to work up to 2200°C, cooling with water and compressed air. Axial vision. Suitable for lenses with diagonal angle of view up to 105°. Made in Stainless steel INOX AISI316L. Diameter: 89mm, length: 700mm

SON01X703_F

Housing SONDATEC 2.0 as SON01X703 supplied version with welded flange to be specified in the order

SON01X100

Housing SONDATEC 2.0 for cameras CAMTEC series, designed for continuous operation with high temperatures up to 2200°C, water and air cooled. Axial vision. Realized in stainless steel AISI316L. (On request available version in AISI310S). Diameter 89mm, length 1000mm. Water fitting 1/2" M-BSPP, flaring 60°. Air 3/8" M-BSPP

SON01X100_F

Housing SONDATEC 2.0 as SON01X100 supplied version with welded flange to be specified in the order

SON01X101

Housing SONDATEC 2.0 as SON01X100 with connections for air and water placed on the left

SON01X102

Housing SONDATEC 2.0 as SON01X100 with connections for air and water placed on the right

SON01X120

Housing SONDATEC 2.0 for cameras CAMTEC series, designed for continuous operation with high temperatures up to 2200°C, water and air cooled. Axial vision. Realized in stainless steel AISI316L. (On request available version in AISI310S). Diameter 89mm, length 1200mm. Water fitting 1/2" M-BSPP, flaring 60°. Air 3/8" M-BSPP

SON01X120_F

Housing SONDATEC 2.0 as SON01X120 supplied version with welded flange to be specified in the order

SON01X121

Housing SONDATEC 2.0 as SON01X120 with air and water inlet connection placed on the left

SON01X122

Housing SONDATEC 2.0 as SON01X120 with air and water inlet connection placed on the right

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 2200°C

sonda^{tec}

SONDATEC LAMP housing series have been developed to allow the use of lights in high temperature environments

1.0



2.0



LAMP

X

A

Lenght (mm)

- 1 = 1200
- 2 = 3000
- 3 = 300
- 5 = 1000
- 6 = 1600
- 7 = 700
- 9 = 900

B

Type of sleeve

- A = SondaTec 1.0
- D = SondaTec 2.0

C

Consumption

- 1 = 20W
- 2 = 35W

D

Different versions depending on functionality available

Product code configuration table: SondaTec LAMP series

0	1	X	A	B	LAMP
			Type of mounting	Type of sleeve	
			1 = 1200	A = SondaTec 1.0	
			2 = 3000	D = SondaTec 2.0	
			3 = 300		
			5 = 1000		
			6 = 1600		
			7 = 700		
			9 = 900		

Product code configuration table: Headlights LAMPX series

LAMP	X	A	B	C	D
		Lenght (mm)	Type of sleeve	Consumption	
		1 = 1200	A = SondaTec 1.0	1 = 20W	Different versions depending on functionality available
		2 = 3000	D = SondaTec 2.0	2 = 35W	
		3 = 300			
		5 = 1000			
		6 = 1600			
		7 = 700			
		9 = 900			

HIGH TEMPERATURE HEADLIGHTS

LAMPX3A00



Assembled Star halogen lamp 35W for SONDATEC 1.0, L=300mm. Voltage: 12V. Bulb socket type: GU4. Light beam angle: 40°. Average duration: 2000h. Lamp diameter: 35mm. Supplied complete with sleeve, back flange and relevant mechanical part for centering with probe SON01X series - LAMP.

LAMPX7A00

Assembled Star halogen lamp 35W for SONDATEC 1.0, L=700mm. Voltage: 12V. Bulb socket type: GU4. Light beam angle: 40°. Average duration: 2000h. Lamp diameter: 35mm. Supplied complete with sleeve, back flange and relevant mechanical part for centering with probe SON01X series - LAMP.

SON01X3ALAMP

SONDATEC 1.0 housing for headlights serie LAMP12X, water and air cooled. Straight vision. Made by stainless steel AISI316L. Diameter: 101,6mm, length: 300mm.

SON01X3ALAMP_F



SONDATEC 1.0 housing for headlights serie LAMP12X, water and air cooled. Straight vision. Made by stainless steel AISI316L. Diameter: 101,6mm, length: 300mm. Version complete with welded flange.

SON01X7ALAMP



SONDATEC 1.0 housing for headlights serie LAMP12X, water and air cooled. Straight vision. Made by stainless steel AISI316L. Diameter: 101,6mm, length: 700mm.

PROTECTION DEVICES & CONTROL CABINETS

► PROTECTION DEVICES & CONTROL CABINETS

OUtec*



- External wall mounted
- Self protected
- Conical hole required

OUT03X100

Fixing and protection device for SONDATEC housing for furnace wall, complete with [gate]shutter and high temperature pneumatic cylinder. Water cooled with air barrier circuit. Made in stainless steel AISI304. Provided with insulator panel to be interjected on the wall and flexible tube for connection with housing, length 1m.

OUT03X210

Protective device and mounting housing for SONDATEC complete with locking flap controlled by a pneumatic cylinder in case of absence of air. Circuit for water cooling and compressed air barrier. Made of stainless steel AISI304. Supplied with reinforced flexible hose for connection with housing, L=1m.

SON01F010

Mechanical flange for matching SONDATEC 1.0 to OUTEC or furnace wall. Made by stainless steel AISI304L. Diameter= 101,6mm

SON01F016

Mechanical flange for matching SON01X30A to OUTEC or furnace wall. Made by stainless steel AISI304L. Diameter= 101,6mm

03A034A0

Thermal insulation panel made by KAOWOOL for temperature up to 1260°C. Thickness 10mm. To be fit between OUTEC 1.0 and furnace wall.

03A035A0

Thermal insulation pannel made by KAOWOOL for temperarture up to 1260°C. Thickness 10mm. To be fit between OUTEC 2.0 and furnace wall.

OUTEC DEVICES

0	2	X	A	B	C	D	E
			Type of mounting	Actuator length	Type of housing	On board air circuit pipes	Fittings
			1 = straight	0 = 1000 mm	1 = Sonda 2.0	1 = PA11	1 = AISI316L
			2 = inverted	1 = 1300 mm	2 = Periscope	2 = Cu	2 = Nickel plated
			3 = HT straight	2 = 1200 mm	3 = Sonda "S"		
			4 = HT inverted	4 = 400 mm	4 = Sonda "P"		
			6 = HT vertical	6 = 600 mm			
				9 = 900 mm			



- Inside type with retraction device
- Mounting solutions: axial or inclined
- Self protected
- Axial hole required
- Wide angle of view available

*Depending of the application may be not required.

INTEC02X18111

Advancement/withdrawal system for SONDATEC 2.0 series, with pneumatic actuator (ride: 800mm) provided with:

- Self supporting framework with rails and porthole plate to fixing to furnace/boiler wall. Made in carbon steel varnished with epoxy pre-treatment 60µm and painting with polyester 60µm; Probe mounting overlying the actuator.
- Pneumatic cylinder with slide to support SONDATEC;
- Pneumatic circuit on board realized with pipes made of PA11.
- Fittings for external pipes for hydraulic and pneumatic circuit made of Stainless Steel AISI316L.

INTEC02X18121

Advancement/withdrawal system as INTEC02X18111, but with pneumatic circuit on board realized with pipes made of Cu

INTEC02X18112

Advancement/withdrawal system as INTEC02X18111, but with fittings for external pipes for hydraulic and pneumatic circuit made of Nichel plated brass.

INTEC02X18122

Advancement/withdrawal system as INTEC02X18111, but with pneumatic circuit on board realized with pipes made of Cu and with fittings for external pipes for hydraulic and pneumatic circuit made of Nichel plated brass

INTEC02X58121

Advancement/withdrawal system as INTEC02X18121, but with vertical type of mounting (probe mounting overlying the actuator)

INTEC02X38121

Advancement/withdrawal system for high temperature up to 80°C for SONDATEC 2.0 series, with pneumatic actuator (ride: 800mm) provided with:

- Self supporting framework with rails and porthole plate to fixing to furnace/boiler wall. Made in carbon steel varnished with epoxy pre-treatment 60µm and painting with polyester 60µm;
- Pneumatic cylinder with slide to support SONDATEC;
- Fan air connection for pneumatic actuator cooling function.
- Pneumatic circuit on board realized with pipes made of Cu.
- Fittings for external pipes for hydraulic and pneumatic circuit made of AISI316L.

INTEC02X48122

Advancement/withdrawal system as INTEC02X38121, but with inverted type of mounting (probe mounting below the actuator) and with fittings for external pipes for hydraulic and pneumatic circuit made of Nichel plated brass

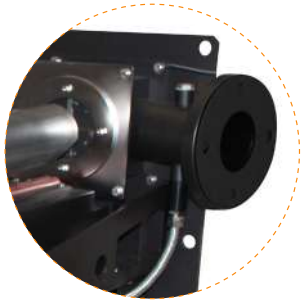
INTEC02X68122

Advancement/withdrawal system as INTEC02X48122, but with vertical type of mounting (probe mounting overlying the actuator)

02A041A0

Screen thermal insulation in sheet KAOWOOL thickness: 10mm Te=1260°C for Intec product.





0	2	D	A	B	C	D
			Air barrier	Temperature Sensor	Type of mounting (back view)	Type of housing
			0 = fan air	0 = Thermostat	0 = with left flange	1 = Sonda 2.0
			1 = compressed air	T = PT100	1 = with right flange (as our standard)	2 = Periscope
			2 = no air barrier	W = PT100 + Thermostat	2 = without flange	3 = Sonda "S"
				N = no temperature sensor	3 = special mounting	4 = Sonda "P"
					4 = pneumatic shutter door	
					5 = vertical	
					4 = with left flange for HT Intec version	

CODES TABLE OF OBLO' FOR INTEC PROTECION DEVICES

EURO

OBLO02D0011

Protective porthole for closing/opening entrance in the furnace/boiler to be positioned on the counter plate, with mechanical shutter, centralizing ring and flange for barrier air (fan) connection on right side. Special mounting, entirely made of stainless steel AISI304. Complete with thermostat. Designed for Intec/Sondatec 2.0

OBLO02D0001

Protective porthole as OBLO02D0011 but with connection on left side

OBLO02D0T11

Protective porthole as OBLO02D0011 complete with temperature sensor PT100 instead of thermostat switch

OBLO02D0T01

Protective porthole as OBLO02D0T11 but with connection on left side

OBLO02D0T21

Protective porthole as OBLO02D0T11 but without flange

OBLO02D1T11

Protective porthole as OBLO02D0T11 but with compressed air connection instead of fan air



INTEC DEVICES - OBLO'

PROTECTION DEVICES & CONTROL CABINETS

► PROTECTION DEVICES & CONTROL CABINETS

Product code configuration table

cabtec

1	1	X	A	B	C
			Application	Different versions depending on sensors / instrumentations on board	Different versions depending on functionality available
			1 = Outec		
			2 = Intec		
			3 = Sondatec		

*for control cabinets made of GRP you have to add "P"

- Management and control of Outec or Sondatec products
- Air & Water cooling
- On Screen Display module available
- Portable solution available

Two segregated units to separate electrical and hydraulic parts

Light indicators to display mains presence and events / alarm conditions



CONTROL CABINETS

CAB11X101AP



Control cabinet with logic controller for OUTEK device, IP solution. Supplied with the following instrumentations:

- Logic controller with display;
- Double stage air filtration unit with dual pressure control valve with gauge;
- Air pressostat switch;
- Electrovalve for open/close control of OUTEK shutter;
- Water flow meter with integrated temperature sensor;
- Camera temperature sensor management;
- Front panel push buttons and signals led's;

Cabinet includes RJ45 sockets for Ethernet cable.

Water pipes are made by copper and air pipes in Rilsan Pa11. Fittings outside cabinet are ½" M-BSPP.

Double cabinet in painted RAL7035 steel, IP66, dimension: 800x500x200mm. Power requirements: 96-264Vac 50/60Hz. Operating temperature: +5°/55°C

CAB11X101AR

Control cabinet as CAB11X101AP but predisposed for switch/FO box containment

CAB11X101DP



Control cabinet with logic controller for OUTEK device, IP solution. Supplied with the following instrumentations:

- Logic controller with display;
- Double stage air filtration unit with dual pressure control valve with gauge;
- Air pressostat switch;
- Electrovalve for open/close control of OUTEK shutter;
- Water flow meter (without display);
- Water temperature sensor;
- Camera temperature sensor management;
- Relay alarm module;
- Front panel push buttons and signals led's;

Cabinet includes RJ45 sockets for Ethernet cable. Water pipes are made by copper and air pipes in Rilsan Pa11. Fittings IN/OUT ½" M-BSPP, sv.60°. Double cabinet in painted RAL7035 steel, IP66, dimension: 800x500x200mm. Power requirements: 96-264Vac 50/60Hz. Operating temperature: +5°/55°C

CAB11X101DR

Control cabinet as CAB11X101DP, but predisposed for switch and FO box containment. Dimension: 900x500x200mm

CAB11X202AP



Control cabinet with logic controller for INTEC device. Supplied with the following instrumentations:

- Logic controller with display
- Double stage air filtration unit with dual pressure control valve with gauge
- Air pressostat switch
- Electrovalve for insertion/extraction camera
- Air Reservoir
- Water digital flow meter
- Water temperature sensor (Pt100 / Pt1000)
- Camera temperature sensor management
- Front panel push buttons and signals led's

Cabinet includes RJ45 sockets for Ethernet cable. Water pipes in copper and air pipes in Rilsan Pa11. Fittings outside cabinet are 1/2" M-BSPP. Double cabinet as painted RAL7035 steel, IP66, dimensions 1200x500x200mm. Power requirements 90-256Vac 50/60Hz. Operating temperature +5°/55°C.

CAB11X202AR

Control cabinet as CAB11X202AP, but predisposed for switch and FO box containment

CAB11X221AA

Control cabinet with logic controller for manage q.ty 1 INTEC device with air cooled Sondatec P. Supplied with the following instrumentations:

- Logic controller with display
- Double stage air filtration unit with triple pressure control valve with gauge
- Air pressure sensor
- Electrovalve for insertion/extraction camera
- Air Reservoir
- Camera temperature sensor management
- 2-In analogue expansion module
- 8 out relè module for alarms duplication
- Front panel push buttons and signals led's
- Power supply unit for camera and instrumentation

Cabinet includes RJ45 sockets for Ethernet cable. Predisposed for ethernet switch containment. Air pipes in Rilsan Pa11. Fittings outside cabinet are 1/2" M-BSPP. Cabinet in painted RAL7035 steel, IP66, dimensions 600x1100x300mm. Power requirements 90-256Vac 50/60Hz. Operating temperature +5°/55°C.

CAB11X306AP



Control cabinet with logic controller for camera CAMTEC and SONDATEC device. Supplied with the following instrumentations:

- Logic controller with display and 2-in analogue expansion module
- Double stage air filtration unit with pressure control valve with gauge
- Air pressostat switch
- Water flow meter
- Water temperature sensor (PT100/PT1000)
- Temperature camera sensor management

Power presence and alarm signals led's on front cabinet door. RJ45 socket for Ethernet cable. Water pipes in copper and air pipes in Rilsan Pa11. Fittings outside cabinet are 1/2" M-BSPP. Double cabinet in painted RAL7035 steel, IP66, dimensions 800x500x200mm. Power requirements 90-256Vac 50/60Hz. Operating temperature +5°/55°C.

CAB11X306A

Control cabinet as CAB11X306AP without RJ45 socket for Ethernet cable.

CAB11X309AP

CAB11X400A



Control cabinet as CAB11X306AP with solenoid valve to manage low air consumption at rest (ECO-MODE function)

Control cabinet designed for portable solutions / mobile inspections with logic controller for camera CAMTEC and SONDATEC device. Supplied with the following instrumentations:

- Logic controller with display and 2-in analogue expansion module
- Double stage air filtration unit with pressure control valve with gauge
- Air pressostat switch
- Water flow meter
- Water temperature sensor (PT100/PT1000)
- Temperature camera sensor management
- Main unit of control camera

Power presence, alarm signals and alarm buzzer led's on front cabinet door. Cabinet includes power supply module. Water pipes in copper and air pipes in Rilsan Pa11. Water fittings outside cabinet 2x1/2" M-BSPP, air 3/8" M-BSPP. Double cabinet in painted RAL7035 steel, IP66, dimensions: 1100x400x250mm. Power requirements 90-256Vac 50/60Hz. Operating temperature +5°/55°C. Supplied on a special trolley for easy movements

CAB11X401A

Control cabinet esigned for portable solutions / mobile inspections as for CAB11X400A, but equipped with internal devices for managing qt.2 CAMTEC and SONDATEC devices.

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 1800°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 1800°C

cam^{tec} S/K

Inclined vision 90°

- Air & Water cooling system

Ø
45mm

“S” series has been developed for all applications that require a small entrance diameter.
Thanks to this feature it is ideal for mobile inspections.

sonda^{tec} S/K

0

1

X

A

B

C

D

Length [mm]

Series

View /
Field of vision

Material /
Connections

1 = 1200

2 = 2000

3 = 3000

4 = 4000

5 = 1000

6 = 1600

7 = 700

8 = 2800

S = Air & water
cooling

K =

D

Part number
configurator
“D”

Material

Air and water
connectors on the:
(rear view, as drawings)

left right up

C

Part number configurator “C”	View	Field of vision
6	Inclined 90°	bottom
7		up
8		left
9		right

** Optimized version for use of the housing only with air cooling circuit

Part number configurator “D”	Material	Air and water connectors on the: (rear view, as drawings)		
		left	right	up
0	AISI316L		•	
1	AISI316L	•		
2	AISI316L			•
3	AISI310S		•	
4	AISI310S	•		
5	AISI310S			•
H	Hastelloy C276		•	
L	Hastelloy C276	•		
U	Hastelloy C276			•

PORTABLE HIGH TEMPERATURE VISION SYSTEMS

CAM12X1S7T

Industrial IP camera with high temperature lens 3,7mm ($\angle H=57^\circ$, $\angle V=31^\circ$) used with SONDATEC S series, axial vision. Length=1200mm. Progressive CMOS 1/4" sensor, f=3.7mm, resolution up to 1280x720 pixels @ 30fps. Configuration of parameters through web server. It requires control unit and separate power supply, available in local JBX or CABTEC. Complete with temperature sensor (Pt1000). Supplied with bracket and flange integrated with air cooling system. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING OF THE CAMERA.

CAM12X2S7T

Industrial IP camera as CAM12X1S7T length= 2000mm

CAM12X6S7T

Industrial IP camera as CAM12X1S7T length= 1600mm

CAM12X7S7T

Industrial IP camera as CAM12X1S7T length= 700mm

CAM12X8S7T

Industrial IP camera as CAM12X1S7T length= 2800mm

SON01X1S92



Camera housing SONDATEC S series for CAMTEC cameras, designed for continuous operation with high temperature up to 1800°C, water and air cooled. Inclined vision 90°, field of vision: right. Made by stainless steel AISI316L, air and water connection on the top. Diameter: 45mm, length: 1200mm.

SON01X2S92

Camera housing SONDATEC S series as SON01X1S92 with length: 2000mm

SON01X8S92

Camera housing SONDATEC S series as SON01X2S92 with length: 2800mm

SON01X1S91

Camera housing SONDATEC S series as SON01X1S92 but with air and water connection on the left

SON01X1S72

Camera housing SONDATEC S series as SON01X1S92 but with field of vision: up

SON01X1S62

Camera housing SONDATEC S series as SON01X1S92 but with field of vision: bottom

SON01X7S62

Camera housing SONDATEC S series as SON01X6S62 but with length: 700mm

SON01X1S82

Camera housing SONDATEC S series as SON01X1S92 but with field of vision: left

SON01X7S82

Camera housing SONDATEC S series as SON01X1S82 with length: 700mm

SON01X7S82_F

Camera housing SONDATEC S series as SON01X7S82 version complete with welded flange for installation on furnace wall

SON01X6S82

Camera housing SONDATEC S series as SON01X1S82 with length: 1600mm

SON01X2S82

Camera housing SONDATEC S series as SON01X1S82 with length: 2000mm

SON01X8S82

Camera housing SONDATEC S series as SON01X1S82 with length: 2800mm



CAM12X1KKT



Industrial IP Full HD camera with high temperature lens diagonal angle 101° (H=91° V=45°) used with SONDATEC K series, inclined vision 90°. Length=1200mm. Progressive CMOS 1/2,9" sensor, f=3.7mm, Full HD resolution 1920x1080 pixels @30fps. Configuration of parameters through web server. It requires control unit and separate power supply, available in local JBX or CABTEC. Complete with temperature sensor (Pt100/Pt1000). Supplied with bracket and flange integrated with air cooling system. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING OF THE CAMERA

CAM12X2KKT

Industrial IP Full HD camera as CAM12X1KKT length=2000mm

CAM12X3KKT

Industrial IP Full HD camera as CAM12X1KKT Length=3000mm

CAM12X5KKT

Industrial IP Full HD camera as CAM12X1KKT Length=500mm

CAM12X7KKT

Industrial IP Full HD camera as CAM12X1KKT Length=700mm



SON01X1K62

Camera housing SONDATEC K series for CAMTEC K Full HD cameras, designed for continuous operation with high temperature up to 1800°C, water and air cooled. Inclined vision 90°, field of vision: bottom. Made by stainless steel AISI316L, air and water connection on the top. Diameter: 57mm, length: 1200mm.

SON01X2K62

Camera housing SONDATEC K as SON01X1K62 with length: 2000mm

SON01X3K62

Camera housing SONDATEC K as SON01X1K62 length: 3000mm

SON01X5K62

Camera housing SONDATEC K as SON01X1K62 length: 500mm

SON01X7K62

Camera housing SONDATEC K as SON01X1K62 length: 700mm.



HIGH TEMPERATURE CAMERA SYSTEMS UP TO 400°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 400°C

Product code configuration table

acqua^{tec}

0	7	X	A	B	C
			Front glass / Size	Cooling	Versions
			1: Movable Glass (IP43)	0: H2O + AIR	PROGRESSIVE VERSION: Is identified with progressive numbering 1, 2, 3, 4, 5.. for changes to the original project classified with 0
			2: Fixed Glass (IP66)	1: ONLY AIR	
			3: Fixed Glass / Large version	2: ONLY H2O	
				3: NO COOLING	

AIR & WATER COOLED PRESSURIZED CAMERA HOUSING

Pressurized cooling system



- Air or Air&Water cooled pressurized housing
- Useful for Analogue, IP or Infrared camera and various instrumentation
- Up to 400°C

AIR & WATER COOLED PRESSURIZED CAMERA HOUSING

ACQ07X100



Pressurized camera housing ACQUATEC series, working up to 400°C, water and air compressed cooled, with special dust and infrared protection system. Stainless Steel AISI304 made. Water fitting as 1/2" gas M-BSPP, air as 1/4" M-BSPP.

ACQ07X110



ACQUATEC housing for cameras with power supply max 24Vac, designed for continuous application with high temperature up to 90°C, with compressed air cooling system (Tin<35°C). Internal available dimensions: Ø90 x 320mm. Minimal optic usable without interception: 3,5mm (1/3"). Realized in Stainless steel AISI304. Interconnections air circuit 1x1/4"M-BSPP, 60° flared, in nichel plated brass. It requires the use of compressed air instrumental, available through GFATEC filter group (not included).

ACQ07X200



Pressurized camera housing ACQUATEC series. Protection Degree: IP66. works up to 400°C, water and compressed air cooled (Tin<35°C @1Bar - 3Nm3/h), with special air barrier for dust and infrared protection glass. Made with stainless Steel AISI304. Water fitting as 1/2" gas M-BSPP, air as 1/4" M-BSPP.

ACQ07X210



ACQUATEC housing IP66 for cameras with power supply max 24Vac, designed for continuous application with high temperature up to 90°C, with compressed air cooling system (Tin<35°C @1Bar - 3Nm3/h) and special air barrier for crystal protection. Internal available dimensions: Ø90 x 320mm. Minimal optic usable without interception: 3,5mm (1/3"). Realized in Stainless steel AISI304. Interconnections air circuit 1x1/4"M-BSPP, 60° flared, in nichel plated brass. It requires the use of compressed air instrumental, available through GFATEC filter group (not included). Complete with anti-condensation resistance and 12Vdc heating.

ACQ07X211



Compact housing with cooling air (Tin <35°C @ 1 Bar - 3Nm3/h). Internal dimensions: ø 90mm x 220mm, external dimension ø 150mm x 250mm length. Minimum focal lens usable without interception: 3.5mm (1.3"). Constructed in stainless steel AISI 304. Interconnections air circuit: 1x 1/2" M BSPP 60° flared, nickel-plated brass. Customer should supply instrument compressed air ISO 8573-1 at site (GFATEC series filter is suggested). Cable Entry No. 2x1/2" BSPP F-. Cable glands excluded.

ACQ07X220



Pressurized camera housing ACQUATEC IP66 for camera with borosilicate frontal glass and special anti-infrared filter. Internal available dimensions: Ø90 x 320mm. Minimal optic usable without interception: 3,5mm (1/3"). Realized in Stainless steel AISI304.

ACQ07X240



ACQUATEC housing IP66 for cameras with power supply max 24Vac, designed for continuous application with high temperature up to 200°C, with water cooling system. Equipped with standard frontal glass and special anti-infrared filter. Internal available dimensions: Ø90 x 320mm. Minimal optic usable without interception: 3,5mm (1/3"). Realized in Stainless steel AISI304.

ACQ07X300



Pressurized camera housing ACQUATEC IP67, large version, designed for continuous operations up to 400°C. Water and compressed air cooled. Usable front window: Ø110mm, thickness: 5mm. Internal available dimensions: 116x116x485 mm. Realized in electro-polished Stainless Steel AISI316L. Weight: 18Kg. Water fitting 2x1/2"F-BSPP, air 1/4"F-BSPP. Cables entry: 2 M20x1,5. Air filtration unit series GFATEC is requested.

ACQ07G004



Wall mounting bracket for industrial housing type ACQUATEC or SONDATEC and also PTZ DOV.53 serie. Made with stainless steel AISI304.

ACQ07G014



Joint bracket complete with cot for ACQUATEC housing, made with stainless steel AISI304. Allows the vertical adjustment of the housing.

07H001

07H002

07H004

07H005

07H008

07H009



Transparent glass window, diameter 65 mm with 3 mm. Spare parts for water cooled and air cooled camera housing.

Metallic glass window anti-glare, diameter 65 mm with 3 mm. Spare parts for AIRTEC and ACQUATEC camera housing.

Frontal filter Heat resistant and Heat reflecting, resistant to high temperature (up to +300°C), diameter 65mm, thickness 1mm.

Protective glass made of quartz resistant to high temperature. Diam. 65mm, th. 2.2mm. For ACQUATEC housing series.

Spare borosilicate window for ACQ07X300 housing series. Diameter 123mm, thickness 5mm. Usable diameter 110mm.

Borosilicate window resistant up to 400°C. Diameter 65mm, thickness 3mm.



cam^{tec}H

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 90°C

EURO



CAM21X3H2N



Industrial IP camera CAMTEC 21X series supplied with assembled high temperature lens 4m m (Angles H: 69°, V: 39°), to be used with SONDATEC series "H", L=350mm. 1/2,8" Sony Starvis IMX291 CMOS sensor with Full HD 1920x1080 pixel resolution. Min. illumination: 0.001Lux @F1,2. Removable IR cut filter for low light application also. Configuration through web browser and PC (not included). Triple compression: MJPEG, H.264, H.265, H.265+. Power 12-24Vdc / 24Vac, <5W consumption. Complete with AISI316L M20 cablegland. THE PRICE INCLUDES ASSEMBLING, SETTING AND SPECIAL PROGRAMMING FOR THE CAMERA.

sonda^{tec}H

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 90°C

EURO



SON01X3H00



SONDATEC housing "H" series suitable for high dust environments designed for CAMTEC cameras 12X3H-N. Suitable for use with temperature up to 90°C, air cooled. Axial vision, for lens up to 94° diagonal angle of view. Made by Stainless Steel AISI316L. Diameter: 101,6mm, length: 350mm.

SON01X3H00_F



SONDATEC housing "H" series suitable for high dust environments designed for CAMTEC cameras 12X3H-N. Suitable for use with temperature up to 90°C, air cooled. Axial vision, for lens up to 94° diagonal angle of view. Made by Stainless Steel AISI316L. Diameter: 101,6mm, length: 350mm. Version complete with welded flange as indicated on offer.

AIR COOLED PRESSURIZED CAMERA HOUSING

HIGH TEMPERATURE CAMERA SYSTEMS UP TO 90°C

► HIGH TEMPERATURE CAMERA SYSTEMS UP TO 90°C / 250°C

Product code configuration table

airtec

0	8	X	A	B	C
			Length	Power Supply	Window
			3 = 300 mm	0 = 230Vac	0 = Flat Glass
			5 = 350 mm	2 = 12Vdc / 24Vac	1 = Convex Glass
				3 = PoE	3 = Germanium (30Ø usable)
				9 = Ø	5 = Germanium (55Ø usable)
					9 = without window

0 8 X A B C

AIR COOLED PRESSURIZED CAMERA HOUSING



AIRTEC with special Germanium window



AIR08Xxxx



AIRTEC with POE Injector



AIR08X391



- Air cooled pressurized housing
- Useful for Analogue, IP or Infrared camera
- Up to 90°C

AIR COOLED PRESSURIZED CAMERA HOUSING

AIR08X520



Pressurized camera housing for temperature up to 90°C. Internal available dimensions: 105x86x350 mm. Flat glass window: 80x70 mm. Power supply 12Vdc/24Vac for heater and thermostat. Compressed air cooling circuit: interconnection 1x1/4"M-BSPP. Temp. IN <35°C, pressure IN from 0.5bar to 1bar max. Requires the use of air quality instrumentation, available through GFATEC filter assembly series. Designed to operate in dusty environments. Cable glands No. 3 M16x1.5. Die-cast and extruded aluminum body. Opening slide and hang system. Color white RAL9002. IP66. Supplied with air barrier and wall mounting brackets

AIR08X500

Pressurized camera housing as AIR08X520 but power supply 230Vac for heater and thermostat

AIR08X529

Pressurized camera housing as AIR08X520 but without window

AIR08X530

Pressurized camera housing as AIR08X520 but power supply with PoE+ splitter for temperature up to 90°C

AIR08X591



Pressurized camera housing for temperature up to 90°C. Internal available dimensions: 105x86x350 mm. Convex glass window: 80x70 mm. Compressed air cooling circuit: interconnection 1x1/4"M-BSPP. Temp. IN <35°C, pressure IN from 0.5bar to 1bar max. Requires the use of air quality instrumentation, available through GFATEC filter assembly series. Designed to operate in dusty environments. Cable glands No. 3 M16x1.5. Die-cast and extruded aluminum body. Opening slide and hang system. Color white RAL9002. IP66. Supplied with wall mounting brackets.

ACCESSORIES

kit^{tec}

Code	Water	Water	Cleaning Air	Actuator Air	Barrier Air
A	1x1/2"FD-F90	1x1/2"FD-F90	1x3/8"FD-F90	-	-
B	1x1/2"FD-F90	1x1/2"FD-F90	1x3/8"FD-F90	-	-
C	1x1/2"FD-F90	1x1/2"FD-F90	1x3/8"FD-F90	1x1/4"FD-FD	1x1/2"FD-F90
D	1x1/2"FD-F90	-	1x3/8"FD-F90	2x1/4"FD-F90	1x3/8"FD-F90
E	1x1/2"FD-F90	1x1/2"FD-F90	1x3/8"FD-F90	2x1/4"FD-F90	-
F	1x1/2"FD-FD	1x1/2"FD-FD	1x3/8"FD-FD	-	-
G	1x1/2"FD-F90	-	-	-	-
H	-	-	1x1/4"FD-F90	-	-
I	-	-	1x1/4"FD-F90	-	-
J	1x1/2"FD-F90	1x1/2"FD-F90	1x1/4"FD-F90	-	-
L	1x1/2"FD-F90	1x1/2"FD-F90	2x3/8"FD-F90	-	-
M	1x1/2"FD-FD	1x1/2"FD-FD	1x3/8"FD-FD	2x1/4"FD-FD	-
N	1x1/2"FD-FD	-	1x3/8"FD-FD	2x1/4"FD-FD	1x3/8"FD-FD
O	1x3/4"FD-F90	1x3/4"FD-F90	1x3/8"FD-F90	2x1/4"FD-FD	-
Q	1x1/2"FD-F90	1x1/2"FD-F90 (55cm)	1x3/8"FD-F90	-	-
P	Cooling air		1x1/4"FD-F90	-	-
	1x1/2"FD-F90	1x1/2"FD-F90			
**C (1m/2m)	1x1/2"FD-FD	1x1/2"FD-FD	1x3/8"FD-FD	1x1/4"FD-FD	1x1/2"FD-FD
^^D (1m/2m)	1x1/2"FD-FD	-	1x3/8"FD-FD	2x1/4"FD-FD	1x3/8"FD-FD

*For air & water connections between Sondatec 1.0+Outec 1.0 to Cabtec ("C") and between Sondatec 1.0/2.0+Outec 2.0 to Cabtec ("D"), L=1m/2m, please consider the relevant fittings (**C), (^^D).



Type of APPLICATION	
1 = HIGH TEMP. CABLE (Analog)	ELECTRICAL
2 = NO HIGH TEMP. CABLE (Analog)	
3 = HIGH TEMP. + TEMP. SENS. (Analog)	
4 = for CAMTEC "S" + TEMP. SENS.	
5 = HIGH TEMP. CABLE (IP)	
6 = NO HIGH TEMP. CABLE (IP)	
7 = HIGH TEMP. + TEMP. SENS. (IP)	
8 = USB SERVER	
9 = HIGH TEMP. + 2 TEMP. SENS.	
0 = HIGH TEMP. + TEMP. SENS. + Auxiliary signals cables	
A = Sondatec 1.0 to Cabtec	AIR & WATER CONNECTIONS
B = Sondatec 2.0 to Cabtec	
C = Sondatec 1.0 + Outec 1.0 to Cabtec**	
D = Sondatec 1.0/2.0 + Outec 2.0 to Cabtec	
E = Sondatec 2.0 + Intec to Cabtec	
F = Sondatec 2.0 to Intec	
G = Sondatec 1.0 to Outec 1.0	
H = Airtec to JBX	
I = Acquatec (only air) to JBX	
J = Acquatec (air+H ₂ O) to JBX	
L = Acquatec 1.0 (air+H ₂ O) + Outec 1.0 to Cabtec	
M = Cabtec to Intec	
N = Cabtec to Outec	
O = Sondatec 2.0 + Intec to Cabtec	
P = Sondatec P to Intec/Cabtec	
Q = Sondatec 05X--- to Intec	
W = 1x1/2"FD-FD	

B	Type of CONDUIT / TERMINATION	
		0 = Without conduit and termination
		1 = GSWB with MIL-Std connector one-side
		2 = GSWB with MIL-Std connector two-sides
		3 = GSWB without MIL-Std connector
	ELECTRICAL	4 = PVC with MIL-Std connector one-side
		5 = Flexible for use in cable drag chain with MIL-Std connector ohne-side
		6 = Flexible SS316 high temp. <150°C with MIL-Std c. one-side
		7 = SS316 without MIL_Std connectors
	8 = without conduit + 1 MIL-Std connector	
AIR & WATER CONN.	A = GSWB / B	
	B = R1 / SS316 - BSPP	
	C = R1 / B - BSPP	
	D = R1 / SS304 - BSPP	
	N = GSWB / B - NPT	
	O = R1 / SS316 - NPT	
	P = R1 / B - NPT	
	Q = R1 / SS304 - NPT	
	S = SSWB/SS316 BSPP	
<u>Type of reinforcement:</u>		
- GSWB = Galvanized steel wire braided		
- SSWB = Stainless Steel 316 wire braided		
- R1 = Wire braided reinforced		
- PVC = Teaflex "L" sheath IP67		
<u>Type of termination:</u>		
- B = Nichel plated brass		
- SS = Stainless Steel AISI316L or 304		
<u>Type of fitting:</u>		
- BSPP = British Std Parallel Pipe		
- NPT = National Pipe Thread		

LENGTH Cables & Pipes	
A = 1 m	VERSION
B = 2 m	
C = 3 m	
D = 4 m	
E = 5 m	
F = 6 m	
G = 7 m	
H = 8 m	
I = 9 m	
L = 10 m	
M = 11 m	
N = 12 m	
O = 13 m	
P = 14 m	
Q = 15 m	
S = 17 m	
V = 20 m	
Z = 21 m	
Y = 25 m	
W = 1,25 m	
J = 2,50 m (Intec)	

Type of MIL-Std connectors:



CONNECTION KIT

KIT10XCNA0

Kit flexible hoses for hydraulic/pneumatic connection between Sondatec 1.0+Outec 1.0 to Cabtec, composed by: 3x1/2"FD-F90 + 1x3/8"FD-F90 + 1x1/4"FD-FD, BSPP standard. Protected inside a galvanized steel wire braided with nichel plated brass terminations. Length = 1m

KIT10XCAD0

Kit flexible hoses as KIT10XCAD0 length = 4m

KIT10XCAL0

Kit flexible hoses as KIT10XCAD0 length = 10m

KIT10XEAA

Kit flexible hoses for cabinet connection CAB11X200 series to Intec devices, consisting of n°5 pipes: 2x1/2"FD-FD + 1x3/8"FD-FD + 2x1/4"FD-FD length= 1m, BSPP standard. Half-braid protection in galvanized steel, nickel-plated brass terminations

KIT10XEAB

Kit flexible hoses for INTEC connection as KIT10XEAA but with length 2m

KIT10XEAG0

Kit flexible hoses for INTEC connection as KIT10XEAA but with length 7m

KIT10XEAL0

Kit flexible hoses for hydraulic/pneumatic as KIT10XEAA but with lenght = 10m

KIT10XEBE0

Kit flexible hoses for hydraulic/pneumatic connection between Sondatec 2.0+Intec to Cabtec, composed by: 2x1/2"FD-F90 + 1x3/8"FD-F90 + 2x1/4"FD-FD, BSPP standard. Protected inside a wire braided reinforced and cover in black, oil and environment resistant synthetic rubber with AISI316L Stainless Steel terminations. Length = 5m

KIT10XBAE0

Kit flexible hoses for hydraulic/pneumatic connection between Sondatec 2.0 to Cabtec, composed by: 2x1/2"FD-F90 + 1x3/8"FD-F90, BSPP standard. Protected inside a galvanized steel wire braided with nichel plated brass terminations. Length = 5m

KIT10XBAH0

Kit flexible hoses as KIT10XBAE0 but with length = 8m

KIT10XBAL0

Kit flexible hoses as KIT10XBAE0 but with length = 10m

KIT10XHAB0

Kit flexible hoses for pneumatic connection between Airtec to JBX (only air), composed by: 1x1/4"F90-FD, BSPP standard. Protected inside a galvanized steel wire braided with nichel plated brass terminations. Length = 2m

KIT10X71E0

IP electrical signal interconnection kit cable between camera and JBX/CABTEC, composed by Ethernet high temperature cable and temperature sensor (PT100/4-20mA) cable. Supplied with MIL-STD connector one side. Protected inside a flexible galvanized steel wire braided. Length = 5m

KIT10X71L0

IP electrical signal interconnection kit cable as KIT10X71E0 with length = 10m

KIT10X71N0

IP electrical signal interconnection kit cable as KIT10X71E0 length = 12m

KIT10X71E1

IP electrical signal interconnection kit cable as KIT10X71E0 but version for camera's PoE power supply

KIT10X71T1

IP electrical signal interconnection kit cable as KIT10X71E1 with length = 18m

KIT10X71E2

IP electrical signal interconnection kit cable as KIT10X71E1 with length = 5m

KIT10X71Q2

IP electrical signal interconnection kit cable as KIT10X71E1 with length = 15m

KIT10X71E3

IP electrical signal interconnection kit cable as 1 KIT10X71E0 with RG59 cable for analog signal



KIT10X53B0

Electrical IP signal interconnection kit cable, composed by high temperature cable. Protected inside a flexible galvanized steel wire braided. Length = 2m.

KIT10X76C0

IP electrical signal interconnection kit cable between camera and JBX/CABTEC, composed by Ethernet high temperature cable and temperature sensor (PT100/4-20mA) cable. Supplied with MIL-STD connector one side. Flexible armoured high temp <150°C sheath covered by smooth PVC jacket. Length = 3m.

KIT10X91D0

Electrical IP signal interconnection kit cable, composed by high temperature cable + 2 cables for double temperature sensor. Complete with MIL-STD connector one-side. Protected inside a flexible galvanized steel wire braided. Length = 4m.

KIT10X11D0

Electrical signal interconnection kit cable as KIT10X91D0 but composed by high temperature cable consisting of 1 coax RG178 + 2X18AWG + 4x22AWG/ST-FEP-GS-BI with overall shield tinned copper braid.

KIT10X11L0

Electrical signal interconnection kit cable as KIT10X11D0 Length = 10m.

KIT10X31B0

Electrical signal interconnection kit cable, composed by high temperature cable + temperature sensor cable. Complete with MIL-STD connector one-side. Protected inside a flexible galvanized steel wire braided. Length = 2m.

KIT10X31Z0

Electrical signal interconnection kit cable as KIT10X31B0 but with length = 21m.

KIT10X41D0

Electrical signal interconnection kit cable for CAMTEC "K, S & P" series, complete with cable for temperature sensor PT100. Supplied with MIL-STD connector one side. Protected inside a flexible galvanized steel wire braided. Length =4m.

KIT10X41E0

Electrical signal interconnection kit cable as KIT10X41D0 but with length = 5m.

KIT10X53A0

Electrical IP signal interconnection kit cable as KIT10X53B0 but with length = 1m



GFA13XA001

GFA13XA004

GFA13XB100

T820038-50KIT

T820044-50KIT

T840038-50kit

T840044-50kit



Compressed air filtering unit for heavy use, with three filtration stages complete with pressure regulator and inlet pressure gauge. Condensate drain with automatic drain, 5u prefilter and 0.01u submicron filter with automatic drain

Compressed air filter unit heavy-duty with pressure switch, three filtration stages complete with pressure regulator and inlet pressure gauge. Automatic condensate drain with 5u, prefilter and 0.01u submicron filter with automatic system. Adjustable pressure switch for instrument air, range 0.5-8bar. Aluminum body

Double stage compressed air filter unit for temperature up to 65°C, endowed with pressure regulator and manometer. 5u prefilter and 0.01u submicron filter with automatic drainage, both with METAL CUP. Complete with wall fixing bracket

Filter cartridge 5 µm for GFA13XB100 filter group

Filter cartridge 0,01µm for GFA13XB100 filter group

Filter cartridge 5 µm for GFA13XA001 and GFA13XA004 filter groups and for CAB11X control cabinet series

Filter cartridge 0,01 µm for GFA13XA001 and GFA13XA004 filter groups and for CAB11X control cabinet series