



Innovative and stylish housing, entirely built in technopolymer, and designed to simplify installation and servicing, the VERSO POLAR ensures total protection against all environmental conditions. Due to opening from its side, accessibility to the camera, lens and all its connections is made far easier.

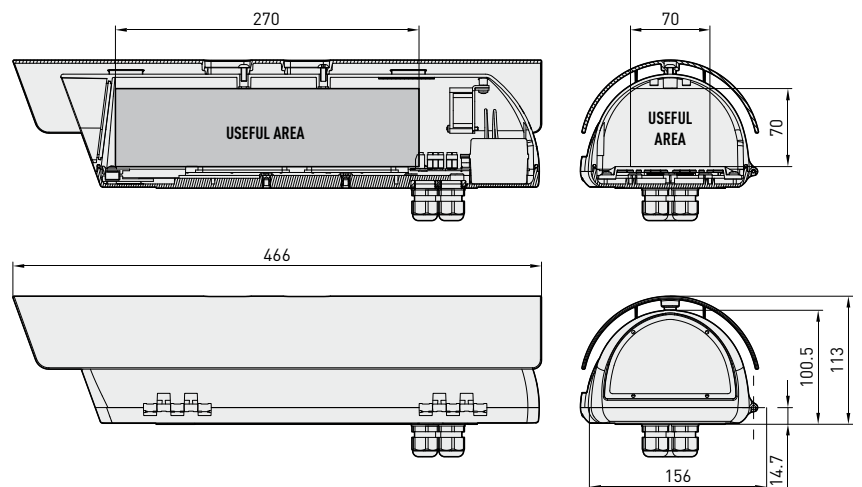
VERSO POLAR is provided with a high performance heating system which allows the working/functioning even at the most severe temperatures.

Entirely manufactured from the newest, most resistant technopolymer, VERSO POLAR guarantees high impact resistance, weather protection from external agents and UV rays. Its weatherproof features are ensured by the neoprene-rubber gaskets and the 3 M16 nickel-plated brass cable glands or by the optional sealing rings, if installed with the internal cable management bracket.

VERSO POLAR offers the possibility of various mounting options: wall mounted bracket, cable managed bracket, which includes the ability to house most combinations of cameras and lenses.

A wide range of accessories is available, including sunshield, heater kit, blower, camera power supply, heater fan-assistant or alarm tamper switch. The accessories are supplied factory installed or as a simple upgrade kit.

- Indoor / Outdoor
- Hi-performance working down to -55°C (-67°F)
- Entirely made of technopolymer (polycarbonate)
- Side opening, easy camera servicing
- Weatherproof standard IP66/IP67 (with cable glands or optional sealing rings)
- Very good resistance to impacts
- Different mounting options: standard bracket or cable management bracket
- Patented



The values are in millimeters.

VERSO POLAR

HOUSING FOR LOW TEMPERATURE INSTALLATIONS



TECHNICAL DATA

VERSO PLUS

Model	Sunshield	Heater 115/230Vac	Heater 12Vdc/24Vac	Max consumption
HPV42K1A160	•	•		120W
HPV42K2A160	•		•	60W

GENERAL

Entirely made of technopolymer (polycarbonate)
 Sunshield in ABS
 RAL9002 Colour
 Stainless steel external screws
 Supplied with instruction manual, desiccants bag, accessories for camera and lens mounting

MECHANICAL

3xM16 cable glands in nickel-plated brass
 Polycarbonate window (BxH): 105x64mm (4.1x2.5in)
 Internal usable area (BxH): 70x70mm (2.7x2.7in)
 Internal usable length with and without accessories: 270mm (10.6in)

ELECTRICAL

Heater Ton 15°C+/-3°C (59°F +/-5°F) Toff 22°C+/-3°C (71°F +/-5°F)

- IN 12Vdc/24Vac, consumption 60W max
- IN 115/230Vac, consumption 120W max

Camera power supply

- IN 100-240Vac - OUT 12Vdc, 50/60 Hz, 1A
- IN 230Vac - OUT 24Vac, 50Hz, 400mA

ACCESSORIES

OHPVS42A000	Sunshield
OHEPS19B	Wide range camera power supply IN 100-240Vac - OUT 12Vdc
OHEPS20	Camera power supply IN 230Vac - OUT 24Vac
OHEGBPS1B	Wide range camera power supply IN 100-240Vac - OUT 12Vdc in weatherproof box
OHEGBPS2B	Camera power supply IN 230Vac - OUT 24Vac in weatherproof box
OHEGBB	Weatherproof junction box, IP55

RELATED PRODUCTS

WBJA	Wall bracket with ball joint
WBOVA2	Wall bracket with internal cable channel
WBOV3A2	Wall bracket with internal cable channel, support plate and integrated junction box
WCM3A	Ceiling bracket with ball joint
WCM5A	Ceiling bracket with ball joint
WCM4A2	Ceiling bracket with internal cable channel
WFWCA	Column mount with ball joint
OWBIP1	Kit special gasket to allow protection IP66/IP67 for WBOVA2 and WCM4A2

ENVIRONMENT

Indoor / Outdoor
 Operating temperature with heater: -55°C / +50°C (-67°F / +122°F)
 Very good resistance to the following chemical agents: basics, alcohols, gasses, hydrocarbon
 Good resistance: organic and inorganic acids, oils
 Low resistance: solvents

COMPLIANCE TO

CE according to EN61000-6-3, EN 60950, EN50130-4
 IP66/IP67 according to EN 60529 with cable glands
 IP66/IP67 according to EN 60529 with special gasket and bracket with internal cable channel
 IP54 according to EN 60529 with bracket with internal cable channel
 V1 fire-self extinguish compliance according to UL94
 Impact resistance IK10 according to EN 50102

SPARE PARTS LIST

DOHPV04	Cable glands, gaskets and screws kit
OHPV42CS04	Complete upper body



Unit Weight:
HPV42K1A160 1.5kg / 3.3lb

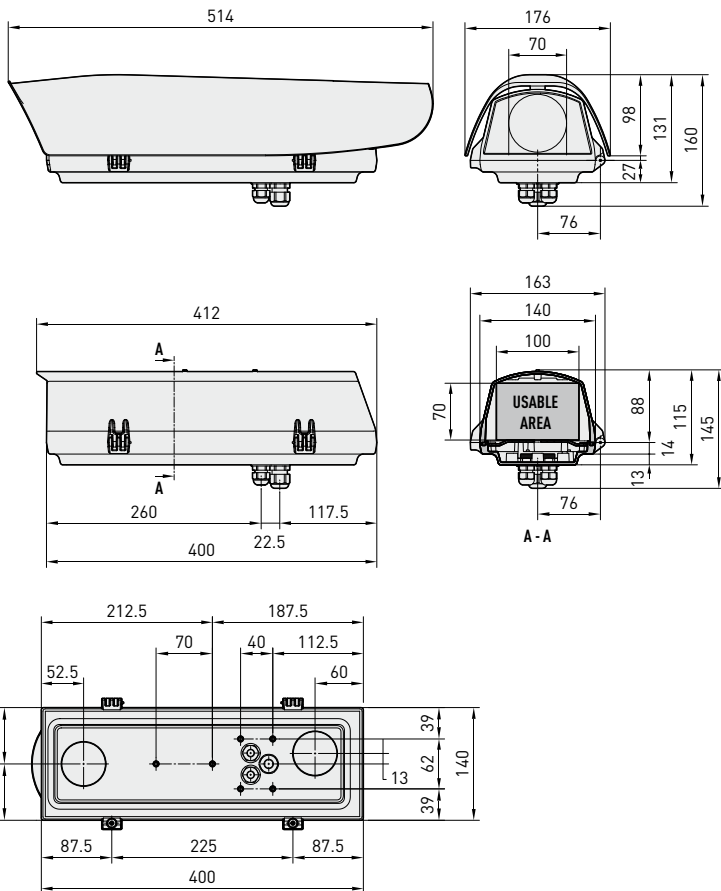
Package Weight:
HPV42K1A160 1.8kg / 3.9lb

Package Dimension (BxHxL):
HPV42K1A160 16.5x15.5x49cm / 6.5x6.1x19.3in

Master Carton:
HPV42K1A160 10 units



- Germanium window glass
- Indoor / Outdoor installations
- Side opening, easy camera servicing
- Weatherproof standard IP66/IP67
- Different mounting options: standard bracket, cable management bracket or P&T



The values are in millimeters.

The HTV housing, equipped with a Germanium window glass has been designed for thermal imaging cameras installations and ensures total protection against all environmental conditions.

The clear Germanium glass composition covers transmission from 7.5 to 14 μ m IR range with the best optical quality.

The window dimension allows the installation of thermal imaging cameras with 9.2mm/45° lens.

Thanks to the side opening, the accessibility to the camera, lens and all its connections is made far easier.

Its weatherproof features are ensured by neoprene-rubber gasket and 3 cable glands.

The body is constructed from aluminium; the sunshield of ABS material.

The HTV offers various mountings modes: wall or ceiling brackets, standard or full cable management brackets, or Pan & Tilt heads.

Wide range of accessories available: sunshield, heater, camera power supply, wiper and alarm tamper switch.

The accessories are supplied as a simple plug-in kit for easy installation or factory-installed.

TECHNICAL DATA

GENERAL

Aluminium
 Sunshield in ABS
 Epoxypolyester powder painting, RAL9002 colour
 Stainless steel external screws
 Supplied with instruction manual, desiccant bag, accessories for camera and lens mounting

MECHANICAL

3xM16 cable glands
Germanium window glass
 2mm (0.07in) thick, Ø 70mm (2.8in) external, Ø 50mm (2.0in) internal
 External non-scratch treatment (hard carbon coating)
 Internal antireflection treatment
 Spectral range from 7.5 to 14µm IR range
 Average transmission from 7.5 to 11.5µm, 94%
 Average transmission from 11.5 to 14µm, 90%
 Internal usable area (WxH): 100x70mm (3.9x2.7in)
 Internal usable length with and without accessories: 250mm (9.8in)

ELECTRICAL

Heater Ton 15°C+/-3°C (59°F +/-37°F) Toff 22°C+/-3°C (71°F +/-37°F)

- IN 12Vdc/24Vac, consumption 20W max
- IN 115/230Vac, consumption 40W max

Camera power supply

- IN 100-240Vac - OUT 12Vdc, 50/60 Hz, 1A
- IN 230Vac - OUT 24Vac, 50/60Hz, 400mA

ACCESSORIES

OHOVS32A000	Sunshield
OHEH26	Heater 115/230Vac
OHEH27	Heater 12Vdc/24Vac
OHOVPS1B	Wide range camera power supply IN 100-240Vac - OUT 12Vdc, 1A
OHOVPS2B	Camera power supply IN 230Vac - OUT 24Vac, 400mA
OHOVTA1	Tamper switch on board with tamper proof screws and key
OHEG6B	Weatherproof junction box IP55

RELATED PRODUCTS

WBJA	Wall bracket with ball joint
WBOVA2	Wall bracket with internal cable channel
WBOV3A2	Wall bracket with internal cable channel, support plate and integrated junction box
WCM3A	Ceiling bracket with ball joint
WCM5A	Ceiling bracket with ball joint
WCM4A2	Ceiling bracket with internal cable channel
WFWCA	Column mount with ball joint
OWBIP2	Kit special gaskets to allow protection IP66/IP67 for WBOVA2 and WCM4A2
PTH300	Pan&Tilt series
PTH900	Pan&Tilt series

ENVIRONMENT

Indoor / Outdoor
 Operating temperature with heater: -20°C / +60°C (-4°F / +140°F)
 Resistant to the salty fog until 1000 hours (according to ISO9227)

COMPLIANCE TO

CE according to EN61000-6-3, EN 60065, EN50130-4
 IP66/IP67 according to EN 60529 with cable glands
 IP66/IP67 according to EN 60529 with special gaskets and bracket with internal cable channel
 IP55 according to EN 60529 with bracket with internal cable channel

SPARE PARTS LIST

OHTV32SUP Complete upper body



Unit Weight:
 HTV32K1 3kg / 6.6lb

Package Weight:
 HTV32K1 3.4kg / 7.5lb

Package Dimension (WxHxL):
 HTV32K1 19.5x14.5x 52.8cm / 7.7x5.7x20.8in

Master Carton:
 HTV32K1 4 units

- Designed to operate in high temperature environments
- Zinc-Selenium glass for thermal cameras, wavelength 7.5 - 14µm (up to 200°C/500°F)
- Sapphire glass for shortwave thermal cameras, wavelength 0.75 - 4.5 µm (up to 400°C/752°F)
- AISI 316 stainless steel double chamber
- Weatherproof standard IP66


NTW

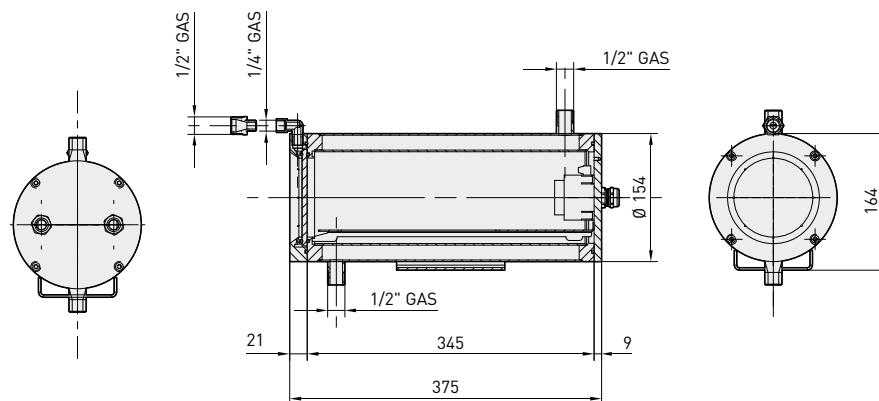
The NTW housing, made of AISI 316 stainless steel, can be equipped with Zinc-Selenium window glass designed for thermal cameras, wavelength 7.5 - 14µm, or with Sapphire window glass for shortwave thermal cameras, wavelength 0.75 - 4.5 µm.

The NTW consists of a body with a double chamber for the circulation of a cooling liquid or air. The NXW is enclosed by two thick flanges at either end and allows cables to pass through by means of two PG13.5 cable glands on the back flange. Two 1/2" gas connectors allow for the cooling liquid inflow/outflow.

The NTW is equipped with an ONXAB2 flange designed to create an air barrier in front of the glass. This prevents the formation of dust deposits and attenuates the heat of the glass itself. With the supplied air barrier, the NXFIGRU filter group is recommended, which purifies the air drawn from a compressor. The solid construction of this housing makes it suitable for heavy duty applications, such as the surveillance of ovens, foundries, and other high temperature environments.


NTW+NXFIGRU+NXWBS1
 (pipes not supplied with products)

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 THERMAL IMAGING SYSTEMS



The values are in millimeters.

TECHNICAL DATA

NTW	
Model	
NTWOK2000	Liquid-cooled housing with air barrier and ZrSe glass
NTWOK3000	Liquid-cooled housing with air barrier and Sapphire glass

GENERAL

Made of stainless steel (Austenitic alloy stainless steel, corrosion and heat resistant according to the following standards):

- UNI 6900-71: X 2 Cr Ni Mo 17 12
- AISI: 316L
- DIN 17006: X 2 Cr Ni Mo 18 10
- N° WERKSTOFF: 1.4404
- AFNOR: Z2 CND 17-12
- BSI: 316 S 12

The screws utilised are in austenitic alloy stainless steel, corrosion and heat resistant according to the following standards:

- UNI 6900: X 5 Cr Ni Mo 1712
- AISI: 316
- ISO quality: A4
- Resistance class ISO: 80

Supplied with instruction manual, desiccants bag, accessories for camera and lens mounting

UNI: Ente Nazionale Italiano di Unificazione, AISI: American Iron and Standard Institute, DIN: Deutsche Industrie Normen, AFNOR: Association Française de Normalisation, BSI: British Standard Institution, ISO: International Organization for Standardization

MECHANICAL

2 cable glands: 2xPG13.5 in nickel-plated brass for external connections

2 1/2" GAS connectors for liquid input / output

1 1/4" GAS connector for air barrier input

External body polishing

O-ring gaskets

9mm (0.35in) thick back flange

Window: internal Ø 60mm (2.4in), external Ø 80mm (3.1in)

External dimensions: Ø 154mm (6.1in), length 375mm (14.8in)

Internal usable dimensions (BxH): 78x78mm (3.1x 3.1in)

Usable length

NTW 345mm (13.6in)

Internal usable length with camera power supply

NTW 280mm (11.1in)

ZrSe glass

4mm (0.16in) thick

Operating temperature 200°C (500°F)

Trasparency from 7.5 to 14 µm

Sapphire glass

1mm (0.04in) thick

Operating temperature 400°C (752°F)

Trasparency from 0.75 to 4.5 µm

Cooling liquid

Max pressure 10ATMS

Application example with incoming water at 20°C (68°F) temperature:

- T environmental 200°C (392°F), water flow 2 l/min (0.5gal/min), T housing internal 32°C (89.6°F)
- T environmental 300°C (572°F), water flow 2.2 l/min (0.6gal/min), T housing internal 41°C (105.8°F)
- T environmental 400°C (752°F), water flow 6.5 l/min (1.7gal/min), T housing internal 44°C (111°F)

Cooling Air

Application example with incoming air at 17°C and an environmental temperature at 80°C

- pressure 1 Bar -flow rate 10 m³/h, the internal temperature is about 45°C
- pressure 2 Bar -flow rate 15 m³/h, the internal temperature is about 35°C

Air filtering

Pressure air flow 0.3-2.5 Bar, filter 0.1 micron

Air Barrier

Max pressure 1Bar

ELECTRICAL

Camera power supply

- IN 230Vac - OUT 12Vdc, 50Hz, 400mA
- IN 230Vac - OUT 24Vac, 50Hz, 400mA

ACCESSORIES

- OHEPS24 Camera power supply IN 230Vac - OUT 12Vdc
- OHEPS25 Camera power supply IN 230Vac - OUT 24Vac

RELATED PRODUCTS

- NXWBS1 Wall bracket for stainless steel housing

ENVIRONMENT

Indoor / Outdoor

COMPLIANCE TO

CE according to EN 61000-6-3, EN 60065, EN 50130-4
IP66

THERMAL IMAGING SYSTEMS



Unit Weight:
NTW 10.2kg / 22.5lb

Package Weight:
NTW 10.8kg / 23.8lb

Package Dimensions (BxHxL):
NTW 24.3x24.2x49.5cm / 9.6x9.5x19.5in

Master Carton:
NTW -