

# SF60 thermal image analogue series

## Fixed camera station



## Overview

The Oxalis SF60 is a fixed camera housing for use in onshore, offshore, marine and heavy industrial environments.

The camera housings are designed for longevity in harsh environments with minimal maintenance.

The large format housing allows the installation of custom specified camera, lens and transmission equipment subject to physical fit and acceptance.

This datasheet covers the thermal imaging configurations.

## Features

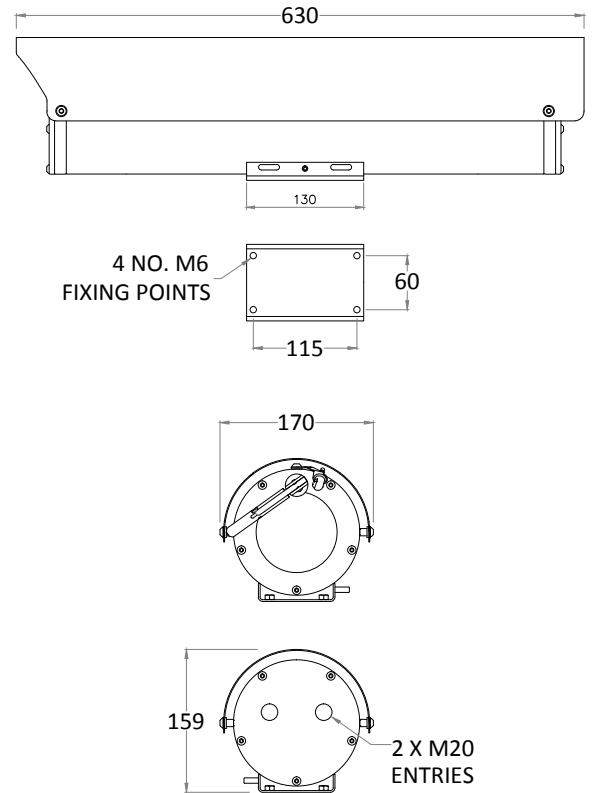
- Electro-polished 316L stainless steel on all welded assemblies
- Compatible with Oxalis SW washer tanks (see separate datasheets)
- Pole or wall mounting options (see separate datasheets)
- Supply voltage options (24 VAC, 110 or 230 VAC, 50/60Hz)
- Operating temperature from -60°C to +70°C\*
- IP66/67

\*Model dependent

## Specifications

Features	
<b>Sun shield</b>	Standard stainless steel 316L mirror finish
<b>Integral wiper</b>	Optional (silicone wiper blades that are resistant and do not perish after long exposure to ozone, UV, ice, snow, heat or cold)
<b>Integral demister</b>	Standard
<b>Washer systems</b>	Compatible with Oxalis SW washer tanks (see separate datasheets)
<b>Telemetry receiver</b>	Integral - Pelco D, P standard protocols (others to specification)
<b>Rotation</b>	Continuous Pan or 350° Rotation (+/- 175° from straight ahead)
<b>Analogue direct fibre out</b>	Optional singlemode 9/125µm or multimode 50/125µm video and data fibre optic transmission, mounted inside the camera station
<b>Ingress protection rating</b>	IP66/67
<b>Type approval</b>	DNVGLCG-0339, 2016 (copper transmission only)
Electrical	
<b>Supply voltage options</b>	24 VAC, 110 or 230 VAC, 50/60Hz
<b>Power consumption</b>	37W Maximum (65W with low temperature operation)
<b>Electrical connections</b>	Terminal block for power, data and video specific to camera configuration
<b>Cable entry</b>	Two M20 entries located in housing rear flange
Mechanical	
<b>Body material</b>	Electro-polished 316L stainless steel on all welded assemblies
<b>Fixings material</b>	A4 stainless steel
<b>Camera station window</b>	Internal AR and external carbon coated germanium Ø50 mm
<b>Mounting options</b>	Pole or wall (see separate datasheets)
<b>Operating temperature</b>	From -60° C to +70° C (model dependent)
<b>Weight (Kg)</b>	Up to 13Kg depending on configuration
Thermal core module options	
<b>T336 7.5-8.3Hz</b>	Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands. 336 x 256 resolution, 17µ pixel size, 7.5Hz NTSC/8.3Hz PAL exportable frame rate, digital detail enhancement
<b>T640 7.5-8.3Hz</b>	Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands. 640 x 512 resolution (PAL), 17µ pixel size, 7.5Hz NTSC/8.3Hz PAL exportable frame rate, digital detail enhancement
<b>T336 25-30Hz</b>	Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands. 336 x 256 resolution, 17µ pixel size, 30Hz NTSC/25Hz PAL frame rate, digital detail enhancement. Subject to export restrictions and licensing
<b>T640 25-30Hz</b>	Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands. 640 x 512 resolution (PAL), 17µ pixel size, 30Hz NTSC/25Hz PAL frame rate, digital detail enhancement. Subject to export restrictions and licensing
Thermal core lens options	
<b>19mm lens</b>	FoV 17° x 13° (336 x 256) / FoV 32° x 26° (640 x 512) Detection of object 4m x 1.5m: Typical 1550m
<b>25mm lens</b>	FoV 13° x 10° (336 x 256) / FoV 25° x 20° (640 x 512) Detection of object 4m x 1.5m: Typical 2200m
<b>35mm lens</b>	FoV 9.3° x 7.1° (336 x 256) / FoV 18° x 14° (640 x 512) Detection of object 4m x 1.5m: Typical 3000m
<b>50mm lens</b>	FoV 6.5° x 5° (336 x 256) / FoV 12.4° x 9.9° (640 x 512) Detection of object 4m x 1.5m: Typical 3900m
<b>100mm lens</b>	FoV 3.3° x 2.5° (336 x 256) / FoV 6.2° x 5.0° (640 x 512) Detection of object 4m x 1.5m: Typical 6000m. Ø90 Germanium housings only

## General arrangement drawing (all dimensions in mm)



# Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

SF60													
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Housing type	Code
Thermal imaging housing with 50mm germanium window	H
Thermal imaging housing with 90mm germanium window	T

Wiper options	Code
Integral wiper switched 24VAC for external washer pump	E
No wiper	N

Video type	Code
Analogue video	A

Day/night module	Code
No D/N camera fitted	N

Thermal core module	Code
T336 7.5-8.3Hz	8
T640 7.5-8.3Hz	2
T336 25-30Hz	9
T640 25-30Hz	4
Customer specific thermal camera	C

Thermal core lens	Code
19mm lens	1
25mm lens	2
35mm lens	3
50mm lens	4
100mm lens	5
Customer specific thermal imaging lens	C

Video system	Code
PAL	P
NTSC	N

Transmission type	Code
Standard electrical	0
Simplex singlemode 9/125µm video/data	1
Simplex multimode 50/125µm video/data	2
Customer specific transmission device	C

Temperature type	Code
-20°C to +70°C*	A
-40°C to +70°C*	B
-20°C to +60°C	1
-40°C to +60°C	2
-60°C to +40°C	3

\*Subject to configuration restrictions

Certification	Code
No Ex certification required	N

Protocol requirements	Code
Pelco D protocol, baud rate 2400bps	D
Pelco P protocol, baud rate 4800bps	P
Vicon protocol, baud rate 4800bps	V
HERNISTM protocol	H
Coe protocol	C
Special - price on application	S
No control protocol required	N

Camera rotation	Code
Not applicable	N

Supply voltage	Code
24 VAC ±10% 50/60 Hz	1
110 VAC ±10% 50/60 Hz	2
230 VAC ±10% 50/60 Hz	3
Special - price on application	S