

# SF60 dual imager IP hybrid series - UL range

Fixed camera station,  
ordinary location



## Overview

The Oxalis SF60 dual imager is a fixed camera housing for use in onshore, offshore, marine and heavy industrial environments. The dual imaging configuration of optical and thermal is used for continued vision in ultra-low light conditions, such as fog or smoke. The large format housing allows the installation of customised equipment (subject to conformity).

The camera housings are designed specifically for the Americas markets or where UL ordinary location standards have been specified. As a result they utilise NPT entries as standard to maximise compatibility with existing installations.

Our camera stations are designed and manufactured for longevity in harsh environments, require minimal maintenance and are fully certified to UL standards.

See separate datasheets for other global certification ranges.

## Features

- Electro-polished 316L stainless steel on all welded assemblies
- Camera station window in toughened glass
- Pole or wall mounting options (see separate datasheets)
- NPT entries as standard
- 4 different size lens options
- 4 resolution/frequency rating options
- Various camera module options
- Options also available for IP, analogue, hybrid, IP over Coax and direct fibre out\* - see specific datasheet
- Supply voltage options (24 VAC, 110 or 230 VAC, 50/60Hz)
- -58°F to +158°F\* operating temperature
- IP66/67

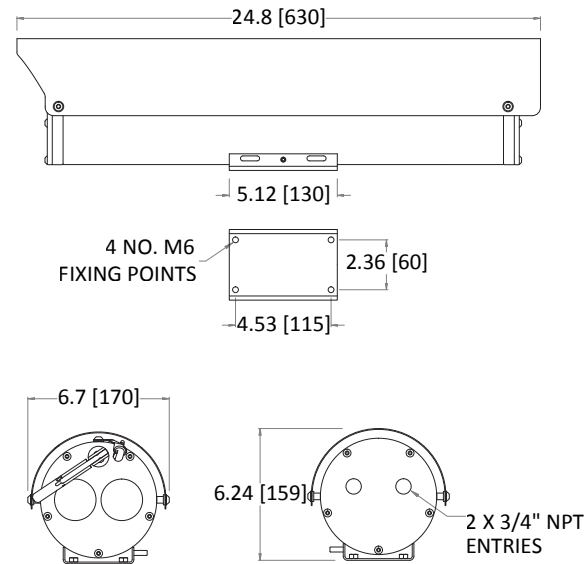
\*Model dependent



## Specification

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 standard protocol (others to specification)
<b>Integral IP encoder</b>	Includes integral video encoder, H.264 / M-JPEG/MPEG-4, Low Latency, Triple Streaming, D1, 2CIF, CIF and VGA Resolution, 25fps (30fps - NTSC) for use with analogue camera modules Optional nonstandard encoder, subject to acceptance, conformity to regulation and testing
<b>IP direct fibre out</b>	Optional integrated media converter, simplex/duplex singlemode 9/125µm or multimode 50/125µm, 10/100Mb ethernet, IEEE 802.3,
<b>IP over coax</b>	Optional integrated IP ethernet-over-coax converter (must be used with compatible Rx equipment)
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>	2 x 3/4" NPT located in 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>	Toughened glass & internal AR and external carbon coated germanium Ø50mm
<b>Mounting options</b>	Pole or wall (see separate datasheets)
<b>Operating temperature</b>	From -58°F to +158°F (model dependent)
<b>Weight (lb)</b>	Up to 31lb depending on configuration
<b>Ingress protection rating</b>	IP66/67
Camera option	
<b>1/4" CCD 36x zoom camera</b>	
<b>Image sensor</b>	1/4" EXview HAD CCD (progressive scan)
<b>Resolution</b>	High resolution mode on: 550 TV lines (default)
<b>Lens</b>	36x zoom 3.4-122.4 mm F1.6 to F4.5, horizontal angle of view 57.8° - 1.7°, 12X digital zoom, auto focus, auto iris
<b>Min. illumination</b>	1/60 s, 1/50 s mode: 1.4 Lux, 1/4 s, 1/3 s mode: 0.1 Lux, 1/4 s, 1/3 s mode & ICR On: 0.01 Lux
<b>S/N ratio</b>	>50dB
<b>Features</b>	ATW, day & night auto/colour / BW (IR-Cut filter removable), camera title ON/OFF
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

## General arrangement drawing (dimensions in inches and 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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<b>Housing type</b>	<b>Code</b>
Dual imaging housing	D

<b>Wiper options</b>	<b>Code</b>
Integral wiper with switched 24VAC for external washer pump	E
No wiper	N

<b>Video type</b>	<b>Code</b>
Integral IP video encoder	H
Hybrid analogue IP system with nonstandard IP encoder	S

<b>Day/night module</b>	<b>Code</b>
1/4" CCD 36x zoom camera	4

<b>Thermal core module</b>	<b>Code</b>
T336 7.5-8.3Hz	8
T640 7.5-8.3Hz	2
T336 25-30Hz	9
T640 25-30Hz	4

<b>Thermal core lens</b>	<b>Code</b>
19mm lens	1
25mm lens	2
35mm lens	3
50mm lens	4

<b>Video system</b>	<b>Code</b>
PAL	P
NTSC	N

<b>Supply voltage</b>	<b>Code</b>
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

<b>Camera rotation</b>	<b>Code</b>
No applicable	N

<b>Protocol requirements</b>	<b>Code</b>
Pelco D protocol, baud rate 2400bps	D
Special - price on application	S

<b>Certification</b>	<b>Code</b>
UL listed	P

<b>Temperature type</b>	<b>Code</b>
-4°F to +158°F	E
-58°F to +158°F	F
-4°F to +122°F	G
-58°F to +122°F	H

<b>Transmission type</b>	<b>Code</b>
Standard electrical	0
Simplex singlemode 9/125µm ethernet	3
Simplex multimode 50/125µm ethernet	4
IP over coax	5
Duplex singlemode 9/125µm	6
Duplex Multimode 50/125µm	7
Customer specific fibre transmission device	C