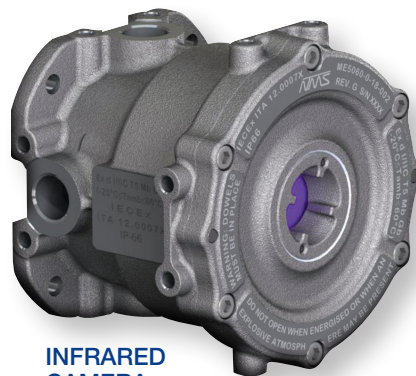
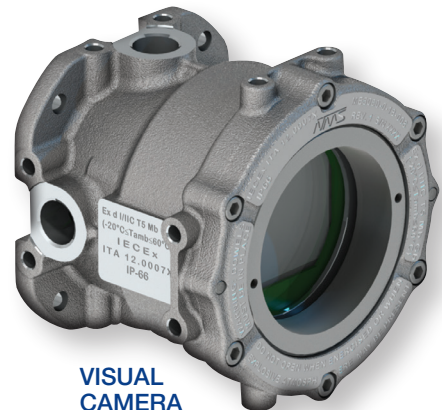


INTRODUCING THE  
**EXTREMECAM™**  
RANGE

**EXPLOSION PROOF INFRARED  
AND VISUAL CAMERA SOLUTIONS  
FOR HAZARDOUS AREAS**



INFRARED  
CAMERA

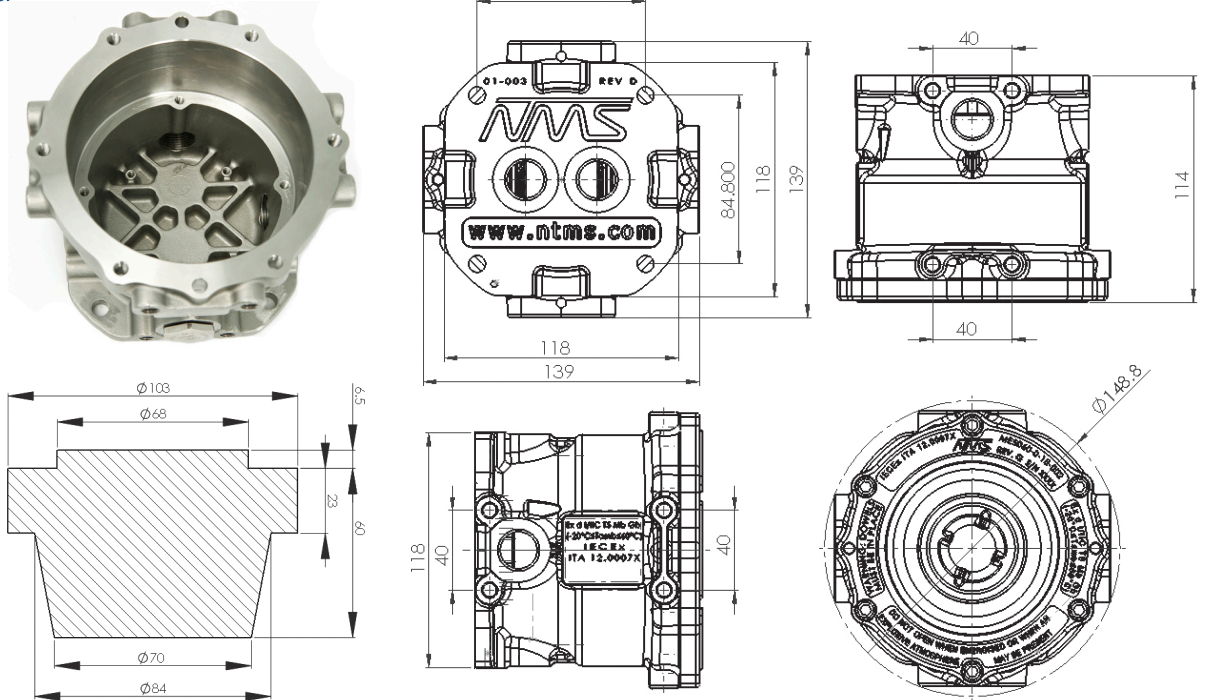


VISUAL  
CAMERA



## 1. THE CAMERA HOUSING

- Solid stainless steel construction suited to harsh and hazardous areas.
- International IECEx Ex d I/IIC T5 Mb Gb certification.
- Wide -20 to +60°C ambient temperature rating.
- Australian designed, certified and assembled.
- Dual stainless steel dowels for ease of assembly.
- Multiple gland entries for flexible installation options.
- Flexible internal componentry mounting options.
- Rear and side (all 4 sides) mounting options to plates or brackets.
- 10 year warranty.



## 2. CHOOSE A CAMERA COVER

### COVERS FOR INFRARED (IR) CAMERA CORES

Features a special lens cover that provides a high index of refraction and low optical dispersion.



2.1 IR Standard lens cover  
(horizontal viewing angle up to 60°)



2.2 IR Wide lens cover  
(horizontal viewing angle up to 120°+)

### COVER FOR VISUAL (COLOUR) CAMERA CORES



2.3 Visual standard cover  
(horizontal viewing angle up to 120°+)

### 3. CHOOSE A CAMERA CORE

The enclosure has been designed to fit a broad range of brands and models of camera core (see dimensions of enclosure in section 1). These include but are not limited to our suggested cores:



#### 3.1 SUGGESTED INFRARED CORE

Choose 45°, 63° or 90° field of view models.  
Note: 90° version requires the IR wide lens cover.



#### 3.2 SUGGESTED COLOUR CORE

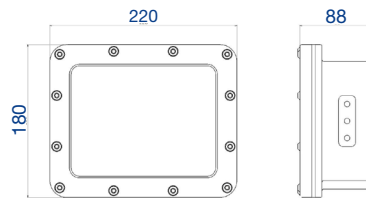
Colour camera – PAL/NTSC.  
Expansively wide/telephoto horizontal field of view.  
High sensitivity in extreme low light environments.

### 4. CHOOSE A DISPLAY TYPE



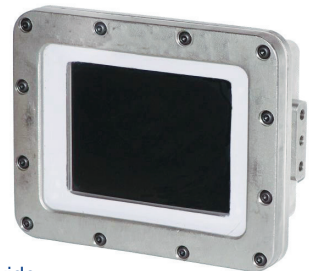
#### 4.1. EXTREMELY ROBUST STANDARD STAINLESS STEEL DISPLAY ENCLOSURE

For extremely harsh and space constrained applications.  
3.5 x 2.5cm display area.  
International IECEx Approval Ex d I/II.  
Scratch resistant tempered glass window.  
Sold with or without our suggested colour video display.



#### 4.2. WIDE SCREEN FLAT PROFILE STAINLESS STEEL DISPLAY ENCLOSURE

Standard 137mm x 104mm viewing area or extra wide 164mm x 124mm viewing area available.  
Stainless steel construction.  
6.5" LCD Display, 4:3 Aspect ratio.  
4 off M25 x 1.5 cable entry's standard with option for a combination of M20 & M25 x 1.5.  
Sold with or without our suggested colour video display.



#### 4.3. ALREADY HAVE YOUR OWN DISPLAY?

Easily connect the camera directly to your existing video display using our purpose built cable and the appropriate connector (PAL/NTSC). We can supply or source the right connector – please contact us for more information.



#### 4.4. CONNECT CAMERA BACK TO A CENTRAL CONTROL ROOM

Various cable types, connectors and associated parts are available - please contact us for more information.  
Transmission of video stream via WiFi also available by request.

All display solutions are designed for:

- Good image quality over longer cable lengths – up to 15m.
- Interference rejection - low engine speeds / idle speed.
- Harsh conditions - stainless steel construction.



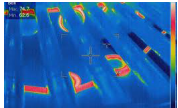
# EXTREMECAM™

## SUGGESTED APPLICATIONS

### UNDERGROUND COAL MINES



Driver awareness and collision avoidance for underground vehicles such as shuttle cars and LHDs (body heat detection). Provides continuous visibility around the vehicle during darkness, steam and dust, and is not blinded by other vehicles' head lights.



Conveyor belt monitoring of e.g. coal temperature, belt change overs and roller temperature.



Fixed mounting for any other mechanical/electrical equipment.



Detection of fire or any equipment that is hotter than it should be.



Adding a visual element of safety to machines that have proximity detection systems fitted.

### IN DEVELOPMENT

Gas type identification e.g. when methane is detected a visual / audible alert is sent to the machine operator.

Use of video analytics software to identify the human body form and then send an alert to the operator or even force shutdown of the machine.

### MONITORING FOR:



Hazardous perimeter areas and coastal areas.



Oil rigs, gas plants, chemical processing plants.



Fuel logistics at terminals and air or sea ports.



Open cut coal mines.



Large scale communication installations.



Military vehicles and fixed applications.



Iron ore and steel.

## SPECIFICATIONS AND APPROVALS

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[www.ntms.com](http://www.ntms.com)

NTMS is wholly Australian, our technology is designed and manufactured in house:

- The First widely adopted methane shutdown system.
- The First broad band power line modem to take real time data from the face.
- The First electronic diesel engine packages for hazardous areas.
- The first infrared camera for use in hazardous areas.

**NTMS**  
NAUTITECH MINING SYSTEMS