



Cameras

TOUGHEYE™ 1700 CAMERAS

The industry-leading, self-cleaning ToughEye TM range of cameras are suitable for any mining and industrial application where a clear view is critical to the success of the operation.

The ToughEye™ 1700 is a field-proven, rugged, single-piece design that delivers optimal, full HD image quality via analogue and IP video outputs.

With an uninterrupted view during self-cleaning, the cameras provide a zero-maintenance* operation.

RCT can customise installations for almost any application.

Features

- No maintenance required for the rated life of the camera
- Suitable for size-restricted and costeffective applications
- Self-cleaning without interruption of view
- ✓ PoE+ (power over Ethernet IEEE 802.3at)

/ Extreme weather resistant

Built tough to endure impact, vibration, and shock

Withstands highly-corrosive environments

Easy installation





		STANDARD			DUTY	
	16049	16050	17003	16051	16052	
Self Cleaning	✓	✓	✓	✓	✓	
Corrosion resistant				✓	✓	
80° Horizontal FoV		✓			✓	
100° Horizontal FoV	✓		✓	✓		
SD Card			✓			

Specifications

Resolution:	Full HD (1900 x 1080)	Dimensions:	102mm x 178mm (4" x 7")
Min illumination:	Colour: 0.001 Lux @ F1.2 B/W: 0.0001 Lux @ F1.2	Weight:	2.5kg (5.5lb)
Illumination Dist:	Infrared option: 15m (50') est Visible option: 5m (16') est	Clean cycle:	Configurable timer-based, electrical trigger (up to 24V)
	·	Max wattage:	25W
Horizontal FoV:	80°, 100°	Input voltage:	PoE (power over Ethernet IEEE
Angle of Vision:	82(H) x 61(V) x 104(D)		802.3at), 24VDC
Video (IP):	H.265/H.264/MJPEG	Temp range:	-40°C to 60°C (-40°F to 140°F)
Video (Analogue):	720x486 (NTSC), 720x576 (PAL)		

TOUGHEYE™ 3100 CAMERAS

The industry-leading, self-cleaning ToughEye™ range of cameras are suitable for any mining and industrial application where a clear view is critical to the success of the operation.

ToughEye™ is a field-proven, rugged, single-piece design that delivers optimal image quality via analogue and IP video outputs.

The ToughEye™ cameras provide a zero-maintenance operation and RCT can customise installations for almost any application.

Customised solutions are available.

No maintenance necessary for the rated life of the camera.

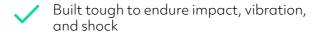


Features

No maintenance required for the rated life of the camera



Extreme weather resistant



Certified for hazardous locations, Class I, Div 2, and Class II, Div 1 explosive dusts and explosive gases environments

Specifications

Illumination Dist:

Video (Analogue):

Camera: 5.9kg (13lbs) Bracket: 2.3kg (5lbs) Weight: 2000 x 1241 Resolution:

Min illumination: 0.1Lux/F2.0 Clean cycle:

Configurable Timer Based, Electrical Trigger (Up to 24V) Extension Time 3sec (typ). Full Cycle Time 10sec (max) (No illumination required for IR/Visible version) Infrared option: 15m (50') est Rated cycles: 60,000 or 90,000

96W Max wattage: 80°, 120° Horizontal FoV:

Visible option: 5m (16') est

(9.5 x 6.7 x 5.1in)

24V Input voltage: H.264 (1920x1080) Video (IP):

MJPEG (1280x720) -40°C to 50°C (Extended Temp range:

Temp) 720x486 (NTSC), 5°C to 50°C (Non-extended 720x576 (PAL) Temp)

Dimensions: Extended: IP Rating: IP68 297 x 170 x 130mm

(11.7 x 6.7 x 5.1in) Vibration: Tested to 11g Retracted:

241 x 170 x 130mm



			STAN	DARD					EXT	REME			
	15724	15863	15726	15864	15725	15727	15865	15729	15728	15866	15731	15730	
Self Cleaning	✓	✓	✓	✓	✓	/	✓	✓	✓	✓	✓	✓	
Heavy Duty			✓	✓		✓				✓			
80° Horizontal FoV	✓		✓		✓	✓		✓	✓		✓	✓	
120° Horizontal FoV		✓		✓			✓			✓			
5°C to 50°C	✓	✓	✓	✓	✓	/							
-40°C to 50°C							✓	✓	✓	✓	✓	✓	
60,000 Cycles	✓	/			✓		✓	✓	✓				
90,000 Cycles			✓	✓		✓				✓	✓	✓	
Infrared					/	/		✓			✓		

TOUGHCAM™ 1000 CAMERAS

RCT's remote control machine components include a variety of cameras that have been designed to operate in the harshest conditions.

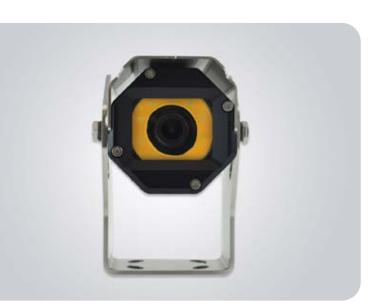
A selection of angle lenses are available to suit a variety of applications.

All cameras are rated to IP69 standards and designed to deliver high-quality video images under extreme conditions experienced in both underground and surface mining environments.

Features

- Multi voltage
- Current draw of 110mA
- Sealed to IP69 standards

- Reverse polarity and short circuit protected
- Optimised lens angle for underground
- Utilises CCD HAD II technology





	EXTREME						
	16690	16688	16419	16420	16689		
20° Horizontal FoV	✓						
60° Horizontal FoV		✓					
80° Horizontal FoV			✓				
100° Horizontal FoV				✓			
125° Horizontal FoV					✓		

Spec	:ifica	tions
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Min illumination:

Weight:

1920 (H) x 1080 (V) Resolution:

Color: 0.001 Lux @ (F1.2, AGC ON) B/W: 0.0001 Lux @ (F1.2, AGC

Horizontal FoV: ~ 20°, 60°, 80°, 100°, 125°

H.265 (1920x1080) Video (IP):

H.264 (1920x1080) MJPEG (1280x720)

68mm dia x 117mm (2.677in x Dimensions:

4.582in)

0.65kg (1.433lb) 1.1kg (2.425lb) with Bracket and

Sunshield

PoE (IEEE802.3af/at, Power

Class 4)

Power consumption: 4W, 10.5W (heating)

Input voltage: 36 - 57V

Temp range: -40°C to 60°C

IP Rating: IP69

Tested to 11g Vibration:

Cables

TOUGHEYE™ 1700 CAMERAS

DUAL OUTPUT CABLE - IP & ANALOGUE COMBINED

- Heavy Duty
- Temp Rating -40°C (-40°F)
- IP and Analog

5m | PN **16142** 6m | PN **16343** 8m | PN **16345** 12m | PN **16344**

EXTENDER MAIN CABLE

Dual Output

3m | PN **16614** 3m | PN **15734** 10m | PN **16615**

IP CABLE

- Heavy Duty
- Temp Rating -40°C (-40°F)

1m | PN **16961** (90° connector)

1m | PN **16053** 5m | PN **16054**

ADAPTOR CABLE MIL SPEC TO RJ45

PN 16084

ADAPTOR CABLE M12 CONVERSION

6m | PN **16506** 8m | PN **16507** 12m | PN **16508**

TOUGHEYE™ 3100 CAMERAS

DUAL OUTPUT MAIN CABLE - IP & ANALOGUE

Temp Rating -40°C (-40°F)

5m | PN **15735** 10m | PN **15736** 15m | PN **15737** 22m | PN **15738** 25m | PN **15739**

PROGRAMMING CABLE

PN **16231**

BREAKOUT CABLE

1m | PN **15845**

POWER CABLE 3M

3m | PN **15845**

GENERIC

ADAPTOR CABLE BNC TO CATERPILLAR ANALOG MONITOR

1m | PN **17005**

BREAKOUT CABLE EXTERNAL MONITOR - 1M BNC MONITOR INPUT

1m | PN **15862**

Accessories

TOUGHEYE™ 1700 CAMERAS

BOOST BOX FOR MONITOR INTERGRATION

- 9-36VDC
- 1 Channel

1-6.5mm Gland | PN **17233** 9-17mm Gland | PN **17006**

BNC COUPLER BNC

PN 17004

GENERIC

POE INJECTOR 10 - 30VDC

■ -40 TO 60°C PN **16632**

JUNCTION BOX DUAL OUTPUT 1 CHANNEL SUITS ANALOG

- Dual Output
- 1 Channel

PN **15858**

POE INJECTOR 100 - 240VAC

Non Environmentally Sealed PN 16631

VIBRATION MOUNT TO SUIT TOUGH EYE CAMERA

PN **15800**



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