

ToughCam-1000™ Spec Sheet

Version 1.6

ToughCam-1000™ features the same build quality, reliability, vibration/shock resistance and resilience to the extreme weather as ToughEye-1700™ family of cameras except it does not feature ToughEye-1700™'s self-cleaning capabilities. ToughCam-1000™ would be a good choice for applications with harsh environments that are not necessarily dirty. You can mix and match ToughCam-1000™ and ToughEye-1700™ in the same installation as the cables are interchangeable.



ExcelSense can customize ToughCam-1000™ installations for almost any application. Please inquire with info@excelsensetechnologies.com.

SPECIFICATIONS

GENERAL

Dimensions	68mm dia x 126mm [2.677in x 4.962in]
Weight	0.65kg [1.433lb] - 1.1kg [2.425lb] with Bracket and Sunshield
Power	PoE (IEEE802.3af/at, Class 4)
Thermal	-40°C to 60°C (operation and storage)
IP Rating	Designed to IP69
Vibration	11g

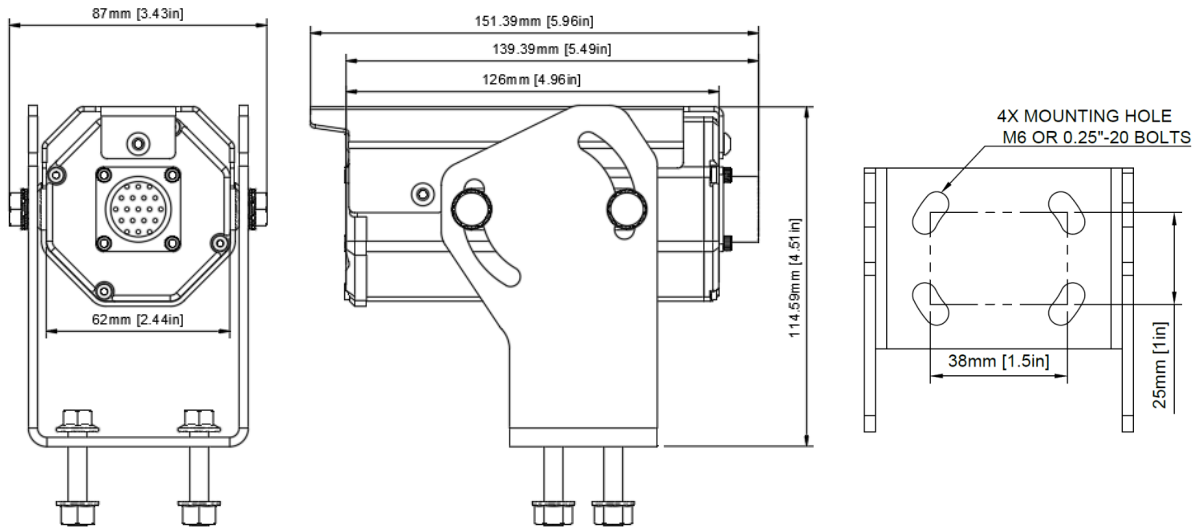
ELECTRICAL

Parameter	Min	Typ	Max
Input Voltage (Active PoE), V_{IN}	36V		57V
Power Consumption, P_{IN}	4W (Idle)		10.5W (Heating)
Max Cable Length ² , L_{MAX}			100m

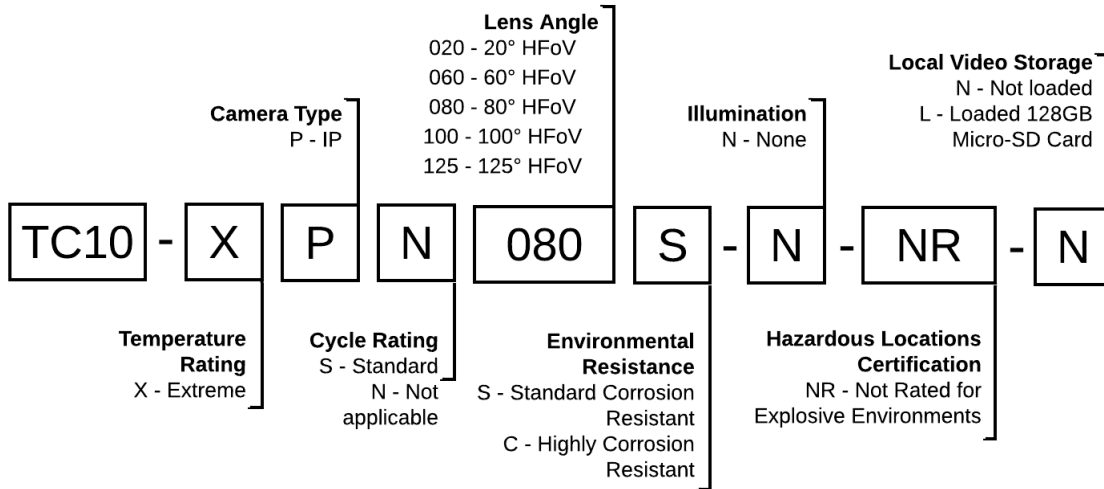
CAMERA

Image Sensor	2.1 MP
Effective Pixels	1920 (H) x 1080 (V)
Horizontal FoV	Approx. 20°, 60°, 80°, 100°, 125°
Min Illumination	Color: 0.001 Lux @ (F1.2, AGC ON) B/W: 0.0001 Lux @ (F1.2, AGC ON)
Wide Dynamic Range	True WDR (>120dB)
IP Video	H.265 (1920x1080) H.264 (1920x1080) MJPEG (1280x720)
Streaming Capability	Stream 1: 1920x1080/1280x720 @50/60fps Stream 2: D1/VGA/640x360/CIF/QVGA @25/30fps Stream 3: VGA/CIF/QVGA @25/30fps
Network	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTCP/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP
ONVIF	Profile S, Profile G, Profile Q
Recording	128GB max storage - Continuous, Motion, Pre/Post Alarm

MECHANICAL DRAWING



ORDERING OPTIONS



TC10 - ToughCam-1000™ camera

Environmental Resistance

S - Standard Corrosion Resistant

C - Highly Corrosion Resistant

Temperature Rating

X - Extreme: -40°C to 60°C

Illumination

N - No Illumination

Camera Type

P - IP: IP Camera

Hazardous Locations Certification

NR - Not Rated for Explosive Environments

Lens Angle (customization available)

020 - Approx. 20° Horizontal FoV

060 - Approx. 60° Horizontal FoV

080 - Approx. 80° Horizontal FoV

100 - Approx. 100° Horizontal FoV

125 - Approx. 125° Horizontal FoV

Local Video Storage

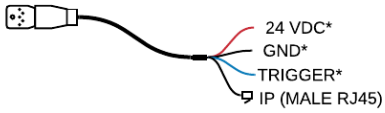
N - Not Loaded

L - Loaded 128GB Micro-SD Card

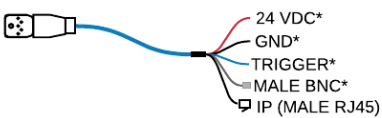
ACCESSORIES

MAIN CABLE

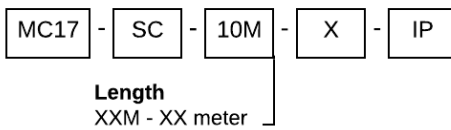
MC17-SC-XXM-X-IP



MC17-SC-XXM-X-DU



Cable Type
 AN - Analog Cable
 IP - IP Cable
 DU - Dual (Analog/IP) Cable



Main cable can be used in IP camera ToughCam-1000 installations. The IP cable includes a shielded Cat-5e cable for 10/100 Base-T signal transmission.

* No connection when used with ToughCam-1000

Available in: **10m, 20m, 30m, 40m** lengths

M12 ADAPTER IP CABLE



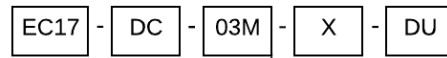
Conn 1
 AC17 - TE1700
 Connector

Length
 XXM - XX meter

Conn 2
 M12XRA - M12
 X coded,
 Right-Angle

M12 adapter cables can be used in all IP camera TC10 installations. These cables take advantage of PoE input to reduce cabling complexity and cost.

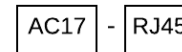
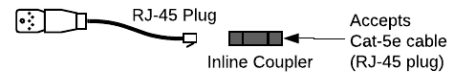
EXTENSION CABLE



Length
 XXM - XX meter

Extension cables can be used to increase the length of existing cables. Available in: **3m, 10m** lengths

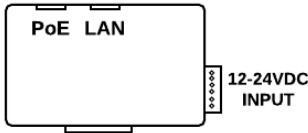
POE ADAPTER KIT



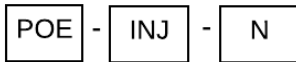
The PoE adapter kit provides a waterproof RJ-45 connection using the IP67 inline coupler, which accepts an RJ-45 plug. When connected to a IEEE802.3af compliant PSE (e.g. PoE Injector or switch), it is the simplest way to power and operate the camera.

PoE / PoE+ INJECTOR

Industrial Version



ExcelSense Part Number



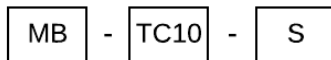
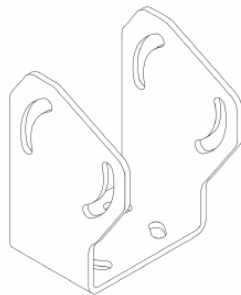
Manufacturer

American Electrical Inc.

Manufacturer Part Number

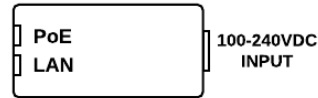
POE-24

Industrial IEEE 802.3af/at PoE/PoE+ injector with integrated DIN-rail mount for use with PoE adapter cable or the IP main cable. Recommended for industrial applications. Accepts 12-24VDC, 33W max.



Standard mounting bracket. Suitable for installations requiring +15° to -60° down camera orientations. The MB-TC10-S comes standard with the ToughCam-1000™.

Standard Version



ExcelSense Part Number



Manufacturer

TrendNet

Manufacturer Part Number

TPE-115GI

Standard IEEE 802.3af/at PoE/PoE+ injector for use with PoE adapter cable or the IP main cable. Recommended for non-industrial indoor applications. Accepts 100-240VAC, 50/60Hz, 0.6A max.

TYPICAL INSTALLATIONS

Network Configuration

The installations shown below illustrate the two main methods of powering and connecting to the ToughCam-1000™: through PoE or 24VDC.

Power and Stream with PoE

This configuration allows any Cat-5e cable to be used to power and communicate with the ToughCam-1000™ camera. No custom cabling is required to be routed, as the Cat-5e cable plugs into the custom short adapter cable for plug and play functionality. As seen in the diagram below, either a PoE compliant power sourcing equipment or a non-compliant switch with a PoE injector can be used to power the camera.

