



FSE SAFE

Singapore | Dubai

TOUGHPIX

DIGITHERM

CONNECT 



TOUGHPIX DIGITHERM INTRINSICALLY SAFE DIGITAL IMAGING CAMERA



TP3rEx

RUGGED AUTHORITY

www.fse-exdigital.com

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DIGITAL CAMERAS

At FSE we believe in the phrase “a picture says a thousand words”. Whether it be a thermal image or a high resolution digital image, our cameras are designed to save you time and money, whilst keeping you safe.

You need a camera that’s tough, because that’s the world you work in. You need a camera that will shake off the trials of working in a hazardous location and still keep functioning. You need a camera that is certified to be safe to use. You need a camera that is Tough, Reliable and Certified, you need TOUGHPIX DIGITHERM intrinsically safe digital imaging camera.

WHY CHOOSE THE TOUGHPIX DIGITHERM?

Rugged, powerful and with ground-breaking affordability, FSE DIGITHERM sets the standard for compact digital imaging cameras. With must-have features including; 5 megapixel visual camera, LED flash, real time visual/thermal image blending, wireless connectivity, FSE DIGITHERM brings a new dimension to the task of finding, documenting and sharing problems.



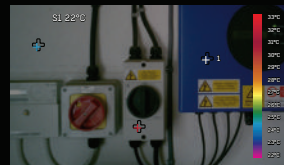
Box analysis

Measure the maximum, minimum and average temperature in a user defined box.



Spot analysis

Place up to three spots at any location on the screen and receive live temperature data at each spot on the display.



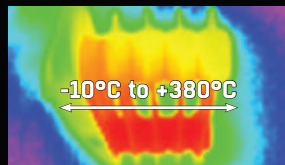
Hot & cold spots

Detect the hottest and coldest point on the image with hot and cold spot hunters.



Lightweight and compact

Weighing in at only 380g (13.4 oz), TOUGHPIX DIGITHERM is light enough to be held in the palm of your hand, compact enough to fit into a work pocket whilst rugged enough to withstand harsh environments.



Enhanced Measurement Algorithms (EMA)

Using FSE EMA, TOUGHPIX DIGITHERM can measure from -10°C (14°F) to +380°C (716°F) including complete radiometric parameter adjustment capability.



Periodic save

Capture difficult process problems quickly and easily by saving visual and thermal images automatically every 30s, 1 min, 2 min and 5 min.



Alarm triggered recording

Simply set an alarm threshold and DIGITHERM monitors continuously until the alarm condition is met, then begins automatically recording both visual and thermal images at preset intervals.



Adaptive Thermal Blending (ATB)

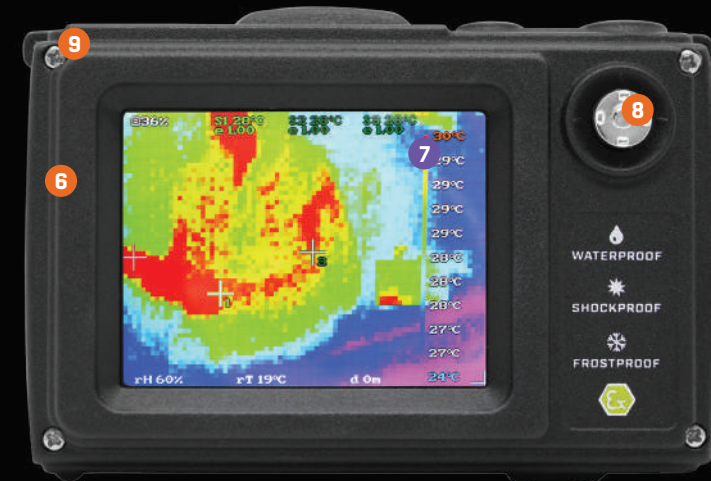
Select a high or low screen threshold and the camera will blend the thermal image into the digital image, at all items above or below the set point an invaluable tool for wide area temperature monitoring.



Removable memory card

TOUGHPIX DIGITHERM is supplied as standard with removable 4GB memory card and USB card reader. Simply remove the card, insert into a PC and download visual and thermal images directly, in an instant.

A LOOK AROUND THE TOUGHPIX DIGITHERM



5 Removable rechargeable battery

Rechargeable lithium ion battery pack providing a huge four hours runtime plus the ability to switch packs and keep working if you need to (only in a safe area).

6 Ruggedized aluminium body

Manufactured from lightweight aircraft grade aluminium, the TOUGHPIX DIGITHERM is both rugged and tough with one goal in mind, quality that's built to last.

7 2.8" LCD backlit display

Compact enough to fit into any work pocket but rugged enough to take the hits, the TOUGHPIX DIGITHERM still has a screen big enough to view images taken in real time; day or night.

8 Simple joystick navigation

With its simple joystick navigation, the menus are quick and easy to navigate, saving time on the task in hand.

9 Wrist strap point

Not only is the TOUGHPIX DIGITHERM small and compact we have made it really easy to carry with our CorDEX wrist strap, which can be worn on either the right or left hand side of the camera.

1 LED flash

With two modes of operation; Wide Area Burst mode and Close-up mode, you have the ability to control the flash to suit your requirements, helping prevent image washout.

2 5MP sensor

Motorised auto focus, capable of resolving both fine close up detail and wide area shots without the need for macro-modes or additional lenses.

3 80x60 thermal sensor

Allowing Infrared vision with its super sensitive 80x60 thermal array as standard, provided 4800 individual measurement points on screen with a temperature range of -10°C (14°F) to +380°C (716°F).

4 WiFi enabled

No more messy cables, with the TOUGHPIX DIGITHERM, wirelessly transfer both infrared and visual images efficiently, even in the hazardous area.

COMPACT, LIGHTWEIGHT AND FSE RUGGED

Manufactured from lightweight but tough, aircraft grade aluminium, TOUGHPIX DIGITHERM weighs in at less than 400grams, that's three times lighter than a ToughPIX Trident!

TESTED TO EXTREMES

Every single component in TOUGHPIX DIGITHERM has been selected with one goal in mind, quality that's built to last. From being **frozen to -20°C** and **dropped from a metre**, to being **blasted with water and dirt** as part of industry leading Ingress Protection testing. TOUGHPIX DIGITHERM has been pushed to extremes.

POWER IN YOUR POCKET



Compact enough to fit into any work pocket but rugged enough to take the hits, TOUGHPIX DIGITHERM is a go-anywhere camera providing the power and resilience to get the job done. Every time.



SINCE WE'RE TALKING POWER, LETS TALK BATTERIES

Your job can't wait for your cameras' battery to recharge. That's what fixed internal batteries do, make you wait. Your time is precious, we know that, TOUGHPIX DIGITHERM has a removable, rechargeable lithium ion battery pack providing a huge four hours runtime plus the ability to switch* packs and keep working if you need to.

*Only in a safe area



BECAUSE IMAGE IS EVERYTHING...

With its industry leading, 5 megapixel visual sensor and ultra-bright LED flash, TOUGHPIX DIGITHERM takes crystal clear, high resolution digital images in broad daylight or absolute darkness.

AUTOMATIC, MOTORISED FOCUS



Never worry about an out of focus image again, TOUGHPIX DIGITHERM takes care of those critical close ups and long range shots automatically. Simply point and let the razor sharp focus system do the rest.

You can't always shoot that perfect picture in a studio, in fact, TOUGHPIX DIGITHERM assumes you won't, ever. On-board bright white LED illumination assures you get those important shots, even in low light. With flash and torch mode, TOUGHPIX DIGITHERM has you covered, every time.



SEEING IN A DIFFERENT LIGHT

So, you have best in its class visual camera, but why stop there? Maximise your return on investment by adding infrared vision to your digital camera with a super sensitive 80x60 thermal sensor array, as standard.



NOT JUST VISION, BUT MEASUREMENT TOO.

TEMPERATURE MEASUREMENT RANGE

-10°C  +380°C

TOUGHPIX DIGITHERM adds a whole new dynamic to your digital camera - Infrared temperature measurement. Delivering the ability to measure temperature from -10°C to +380°C, you can now capture, document and measure at the single click of a button.

WIRELESS DOWNLOAD CAPABILITY

Need to get that all important shot out fast or just can't bare messy cables? Either way, TOUGHPIX DIGITHERM's onboard wireless link allows you to connect and download images directly to your PC or wireless enabled smartphone via the FSE Mobile App for Android.



Not into wireless? That's fine, TOUGHPIX DIGITHERM is supplied as standard with removable 4GB memory card and USB card reader.

Simply remove the card, insert into a PC and download visual and thermal images directly, in an instant.



CONNECT

The FSE Connect software has never been easier when it comes to analysing your images. CorDEX Connect allows you to import digital images from the TOUGHPIX DIGITHERM to enrich reports and illustrate specific areas of interest, combining multiple measurement tools in one simple to use, yet powerful database reporting package.

ADAPTIVE THERMAL BLENDING (ATB)

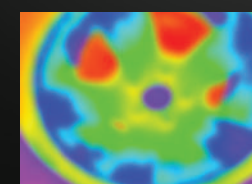
Some high end thermal imagers provide a function called Isotherm, where any temperature above or below a set threshold are set to a single colour.

FSE Adaptive Thermal Blending (ATB) take this function a generation further. With ATB, FSE DIGITHERM **blends** all temperatures above or below a set threshold with the visual image providing not only thermal but also visual identification of suspect equipment.



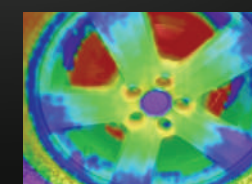
VISUAL IMAGE

+



THERMAL LAYER

=



ATB IMAGE

SPECIFICATIONS

Certificate information

| | |
|-------------------------------|--|
| ATEX / IECEx Certificate No. | ExVeritas 17 ATEX 0277 X / IECEx EXV 17.0013X |
| ATEX / IECEx Certificate type | Ex ib op is IIC T4 Gb Ta = -10°C to +40°C / Ex II 2G |

General information

| | |
|---------------------|--|
| Image download | WiFi, removable memory card (safe area only) |
| Image storage | 8GB |
| Body material | Anodised aluminium with polymeric materials |
| Lens & LCD material | Armoured Glass |
| Weight | 380g |
| IP rating | 54 |
| Operating range | -10°C to 40°C |
| Storage | -20°C to 60°C |

Electrical information

| | |
|--------------|---|
| Battery type | Removable & rechargeable (safe area only) |
| Capacity | 1900mAh |
| Cell type | Li-ion |

Thermal radiometric capability

| | |
|--------------------------|---|
| Sensor | 80x60 pixel array, 9Hz |
| Imaging | Adaptive thermal blending for dual mode imaging |
| Low range | -10°C to +140°C with +/-2°C or +/-2% accuracy |
| High range | -10°C to +380°C with +/-5°C or +/-5% accuracy |
| Sensor NETD | <50mK |
| Radiometric compensation | Emissivity, temperature, distance, humidity |

Visual capability

| | |
|-----------------------------------|---|
| Standard image capture resolution | 5 megapixel |
| Additional features | Auto-focus, auto exposure, powerful flash LED |
| Screen size | 2.8 inches |

