



GUIDE

Grasp the Vitality of the Fire Scene

PR Series Firefighter Thermal Camera

Introduction

The PR series dual-purpose thermal imaging camera for rescue and detection empowers a new perspective for firefighters. It combines high resolution, a large display screen, multiple scene modes, temperature analysis functions, and a strong protection rating, which can break through the limitations of harsh environments such as high temperatures, high humidity, and thick smoke in fire scenes to help firefighters see the surrounding environment quickly and clearly, locate the fire and search for trapped individuals more accurately, providing users with more efficient and safe fire visualization solutions.

Features

- 640x480 or 384x288 resolution infrared detectors for clear thermal maps
- Six image modes such as basic firefighting/fire scenes/search and rescue, etc.
- IP67 and 2-meter drop, function fully for up to 5 minutes at 260°C
- One-click quick saving of images and videos with smooth storage
- support temperature analysis and over-temperature alarms with -20°C to 2000°C measurement range

Applications



Fire reconnaissance



Fire extinguishing



Search and rescue



Fire inspection

Specifications

Product model	PR410	PR610
Imaging and optics		
Detector type	VOx, 7.5 to 14µm	
Infrared resolution	384×288@12µm	640×480@12µm
NETD	≤45 mK	
Frame rate	30 Hz / 9 Hz	
Focal length	9 mm	
Field of view	50°×37°	
IFOV	2.3mrad	1.25mrad
Min. object distance	0.5m	
D:S	435:1	800:1
Focusing mode	Focus-free	
Digital zoom	2x/ 4x/ 8x	
Shot recognition	Auto	
Measurement and analysis		
Measurement range	Support auto-switching: -20°C to 150°C, 0°C to 650°C, Optional 500°C to 2000°C (Aperture is required)	
Measurement accuracy	±2°C or ±2%, whichever is greater	
Analyzed target	Three spots: Center, Maximum temperature, Minimum temperature; Three Fixed Areas: Small, Medium, Large (Alternative)	
Tracking / Alarm	Full screen maximum and minimum temperature tracking; The maximum and minimum temperature tracking of analyzed target; full screen temperature threshold alarm (Vibration, Screen flicker, Buzzer)	
Parameter settings	Emissivity, reflected temperature, target distance, humidity, atmospheric transmittance	
Image display		
Display screen	4.3" LCD, 800×480 Pixel	
Image mode	6 Modes: Basic fire fighting, Black and white, Fire scene, Search and rescue, Thermal detection, Standard	
Image adjustment	Automatic	
Color palettes	Black Hot, White Hot, Iron Red, Arctic, Hot Iron, Rainbow 1, Fulgurite, Tint (Alternative palettes are supported only in Standard mode)	
Functions		
Recording function	Photo and Video	
Others	OTA update	
Storage and transmission		
Storage media	Local storage (128 GB)	
Image storage	JPG with temp info	
Video storage	MP4 format (without temp info); Irgd (with temp info), up to 20 Hz (optional) for temperature analysis	
External interface	Type-C, Micro HDMI, UNC ¼"-20 (Tripod mounting)	
WIFI	Yes, it can be connected to the mobile terminal for image and real-time video transmission	
Power system		
Battery type	Lithium-ion rechargeable battery	
Operating time	≥4 hours	
Charging mode	The device can be charged through desktop charger after shutdown.	
Charging time	90% of full charge in 2.5 hours	
Environmental parameters		
Working temperature	General Working temperature range: -10°C to +50°C; Specific Working temperature ranges: 80°C: 30 minutes, 120°C: 10 minutes, 260°C: 5 minutes	
Storage temperature	-40°C to 85°C	
IP rating	IP67	
Drop	2m drop test	
Certification	CE, FCC, ROHS, UL, UN38.3, MSDS, NFFE	
Physical parameters		
Hardware	WIFI, Speaker	
Weight	≤1.3kg (with battery)	
Size	296×61×76.5 mm	
Software kit	PC: ThermoTools; Mobile: Thermography (iOS/Android)	
Standard	A device (with lens), Lens cover, Lithium-ion battery (3 pcs), Desktop charger, Power adapter, Adapter plug (for China, US, UK, Australia and Europe), TYPE-C USB cable, Micro HDMI cable, Wrist strap, Shoulder strap, Safety box, Packaging list, Quick Start Guide, Data download card (analysis software & user manual), Certificate of approval, Factory certificate	
Options	Battery, Tripod	