ADEPTOR

Guide

APEX VISION

Thermal

Thermal Imaging Pioneer: Engineered for Extreme Firegrounds

PR II Series Firefighter Thermal Camera
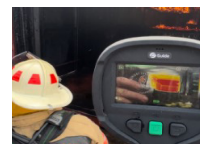
Introduction

PR II series dual-purpose thermal imaging camera for rescue and detection empowers a new perspective for firefighters. The product is certified as Intrinsic Safety Explosion-Proof. 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

- ⦿ Next-gen infrared imaging system APEXVISION for ultra-clarity & precision
- ⦿ 60Hz infrared frame rate with anti-glare display
- ⦿ 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 image & video saving, smooth storage with 128GB capacity
- ⦿ Temperature analysis & over-temperature alarm, -20°C to 2000°C range
- ⦿ Multi-Function Accessories: Dock for charging and data transfer; practical telescopic buckle and lanyard; optional digital camera module.
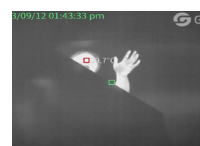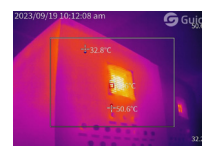
Applications

Fire reconnaissance

Fire extinguishing

Search and rescue

Fire inspection

Specifications

Product model	PR410S	PR610S
Imaging and optics		
Core Technology Item	Equipped with full ApexVision S1 system architecture: Detector ApexCore S1 + Platform Nexus 1.0 + Algorithm SharpIR 2.0	
Detector type	VOx, 7.5 to 14μm	
Infrared resolution	384×288@12μm	640×480@12μm
NETD	15mK	
Frame rate	60Hz/9Hz	
Focal length	9mm	
Field of view	50°×37°	
IFOV	2.27mrad	1.36mrad
Min. object distance	0.5m	
D:S	441:1	735:1
Focusing mode	Focus-free	
Digital zoom	2x / 4x / 8x	
Measurement and analysis		
Measurement range	Support auto-switching: -40°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)	
Alarm	Full screen temperature threshold alarm (Vibration, Screen flicker, Buzzer)	
Image display		
Display screen	4.3" LCD, 800×480	
Image mode	6 Modes: Basic fire fighting, Black and white, Fire scene, Search and rescue, Thermal detection, Standard	
Color palettes	8: Black Hot, White Hot, Iron Red, Arctic, Hot Iron, Rainbow 1, Fulgurite, Tint (Alternative palettes are supported only in Standard mode)	
Image adjustment	Level span mode: Automatic	
Digital camera	5MP (requires optional digital camera module)	
Functions		
Laser	Laser indication & ranging (requires optional digital camera module)	
Recording function	Photo and Video	
Others	OTA update	
Storage and transmission		
Storage media	Built-in storage (128 GB)	
Image storage	JPG with temp info	
Video storage	MP4 format (without temp info); Irgd (with temp info), up to 50 Hz (optional) for temperature analysis	
External interface	USB-C, Micro HDMI, Tripod socket	
Wi-Fi	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	
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	
IP rating	IP67	
Drop	2m drop test	
Physical parameters		
Hardware	Wi-Fi, Speaker	
Weight	1.3kg (with battery)	
Size	296×122×153mm	
Software kit	PC: ThermoTools; Mobile: FocusIR (iOS/Android)	
Standard	A device (with lens), Lens cover, Aperture, Lithium-ion battery (3 pcs), Desktop charger, Power adapter, Adapter plug, USB-C to USB-C Cable, USB-A to USB-C Cable, Micro HDMI to HDMI Cable, Hand strap, Neck strap, Telescopic buckle, Lanyard, Carrying bag, Safety box, Quick Start Guide, Warranty card, Inspection report, Calibration certificate	
Options	Digital camera module, Battery, Tripod	