

PRODUCT OVERVIEW --- DV TYPE (HDV44A25/HDV46A25)

The DV handheld temperature measurement product is equipped with a 480x360/640x512 infrared detector and supports image super-resolution technology, which can provide clearer infrared images and higher temperature measurement accuracy.



HDV44A25/HDV46A25

The 180° rotating lens and 90° rotating screen allow users to freely choose the observation method. The powerful configuration of the 8-megapixel visible light camera module and high-precision professional laser rangefinder, supplemented by voice command recognition and naming, fingerprint unlocking, ultra-high-definition viewfinder, intelligent measurement of target area, flexible setting of emissivity by area and other professional functions, coupled with powerful and professional mobile phone APP and computer software, provides more professional infrared thermal imaging services for every engineer.

Features



Support 4G

Support 4G, support stored pictures, support superimposed GPS, BDS, GLONASS or GALILEO location data



Screen flip

Support 90° screen rotation and 180° lens rotation



Fingerprint unlocking and voice command

Support fingerprint unlocking and intelligent voice command recognition



Laser Distance Measurement

Support laser ranging, automatic, electric, continuous automatic, manual, laser assisted, focusing



Multiple lens replacement

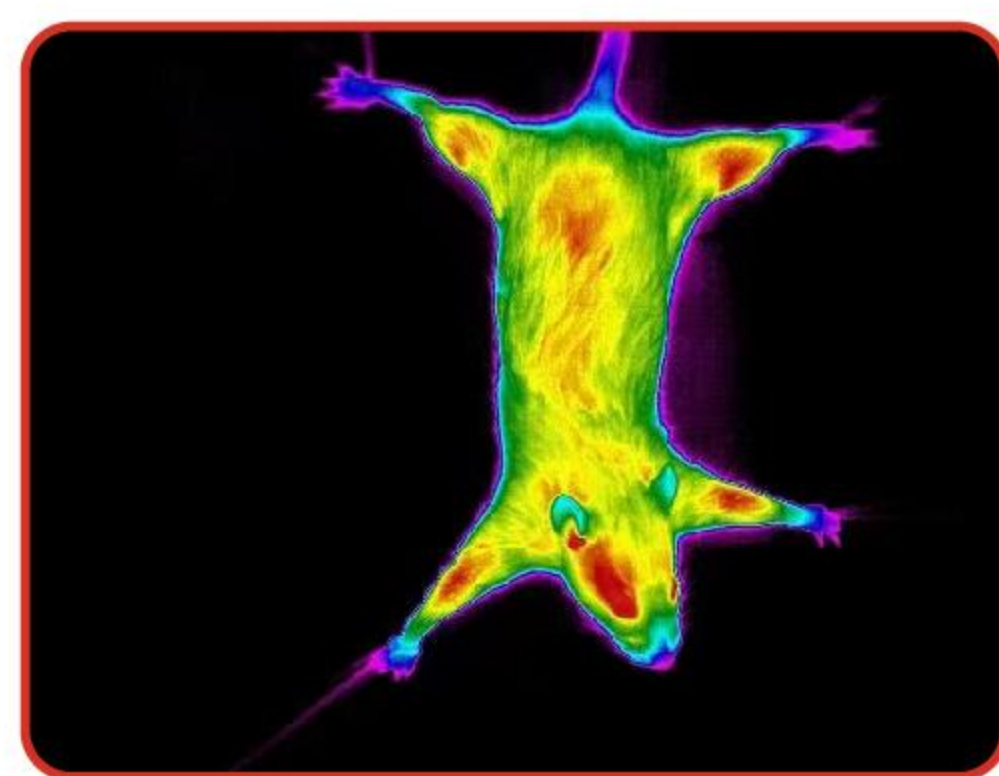
Supports replacement of macro, standard, wide-angle, telephoto, and super telephoto lenses



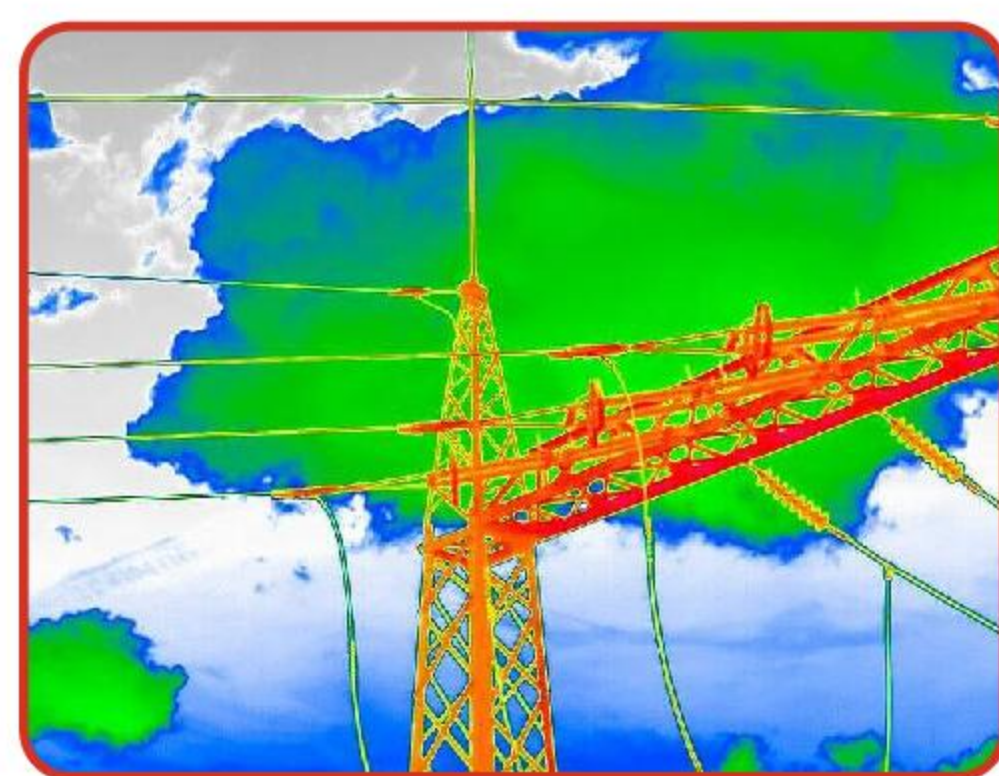
Three-speed temperature measurement

Supports three levels of temperature measurement, up to 2200°C

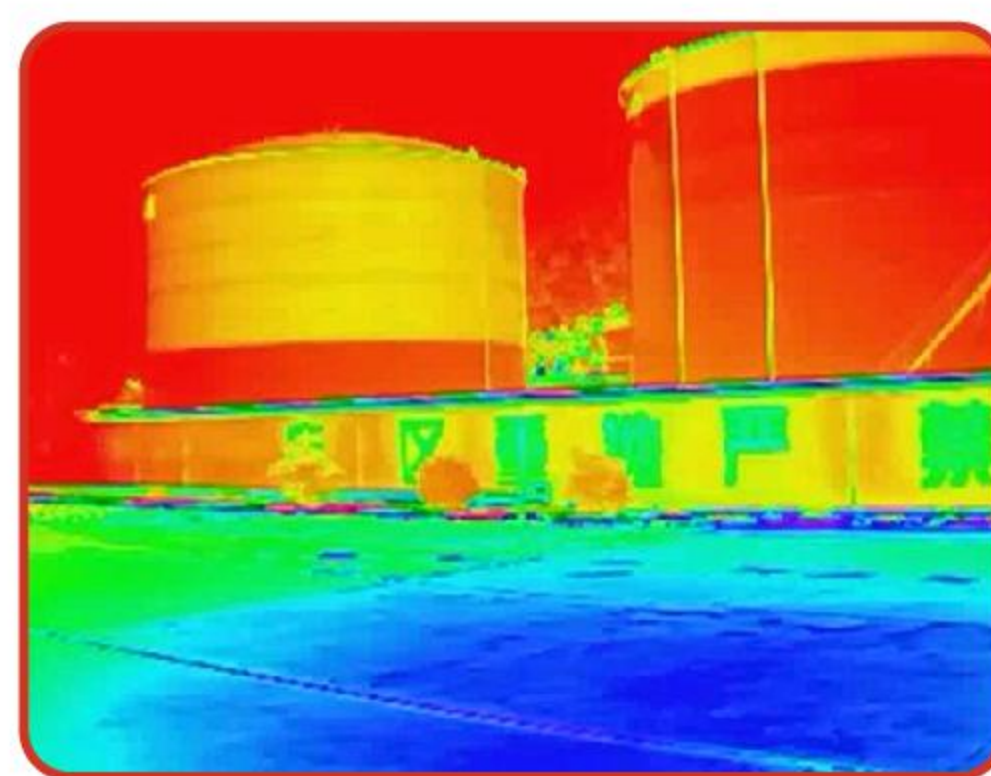
Application Scenarios



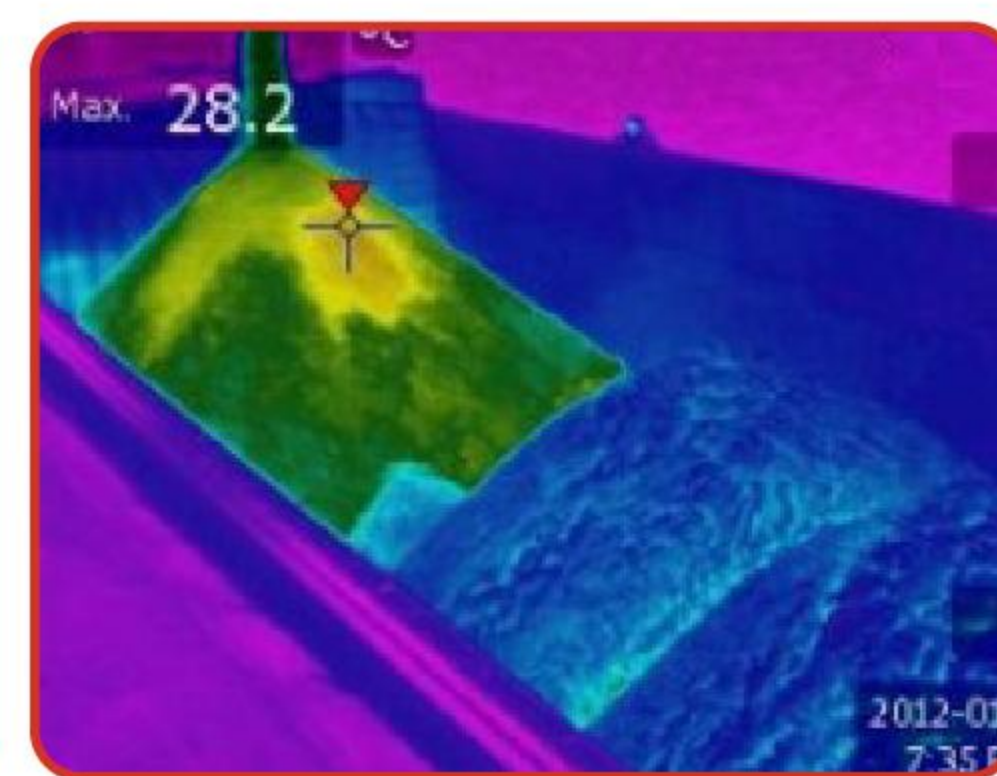
Higher Education and Research



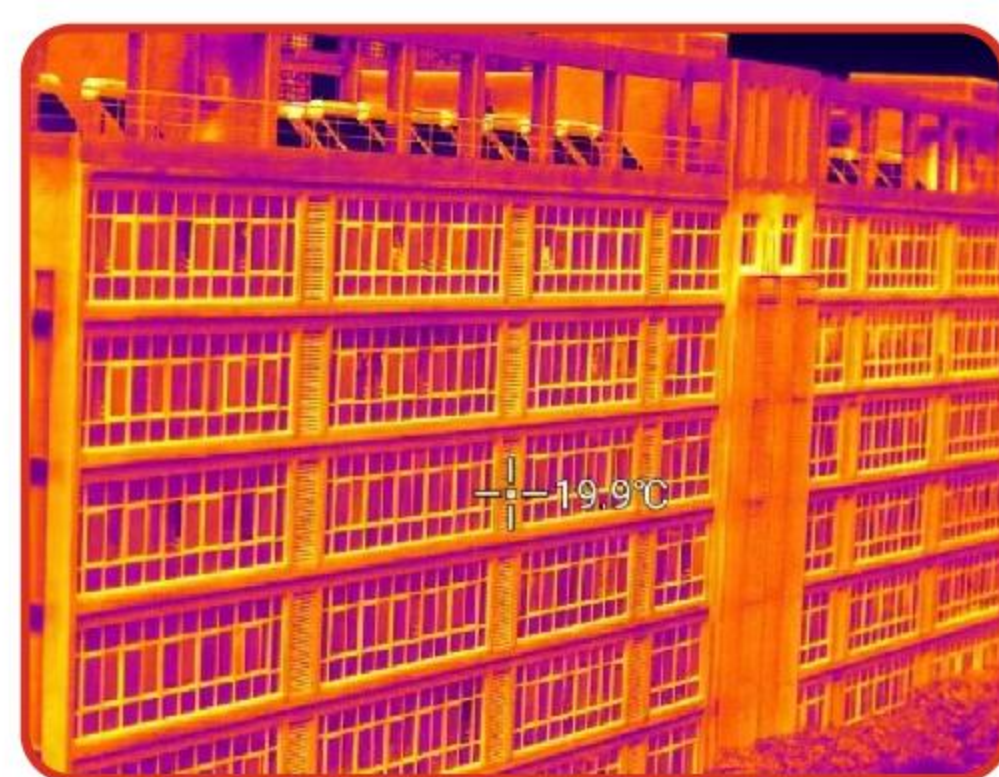
Power operation and inspection



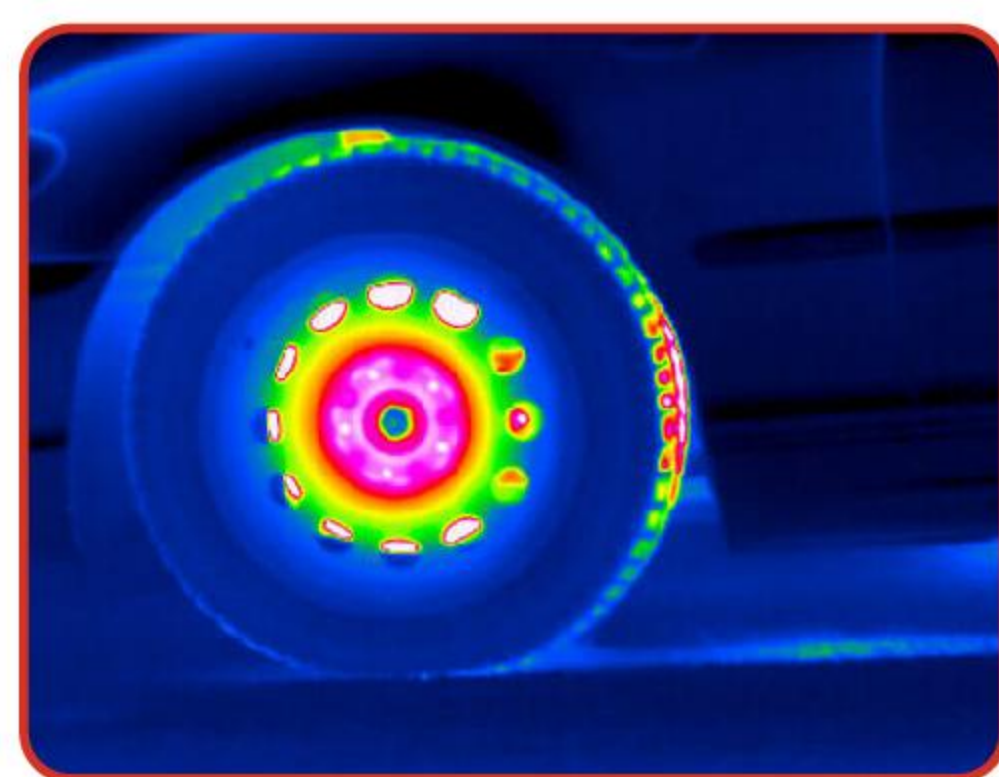
Petroleum and Petrochemical



Coal Mining and Metallurgy



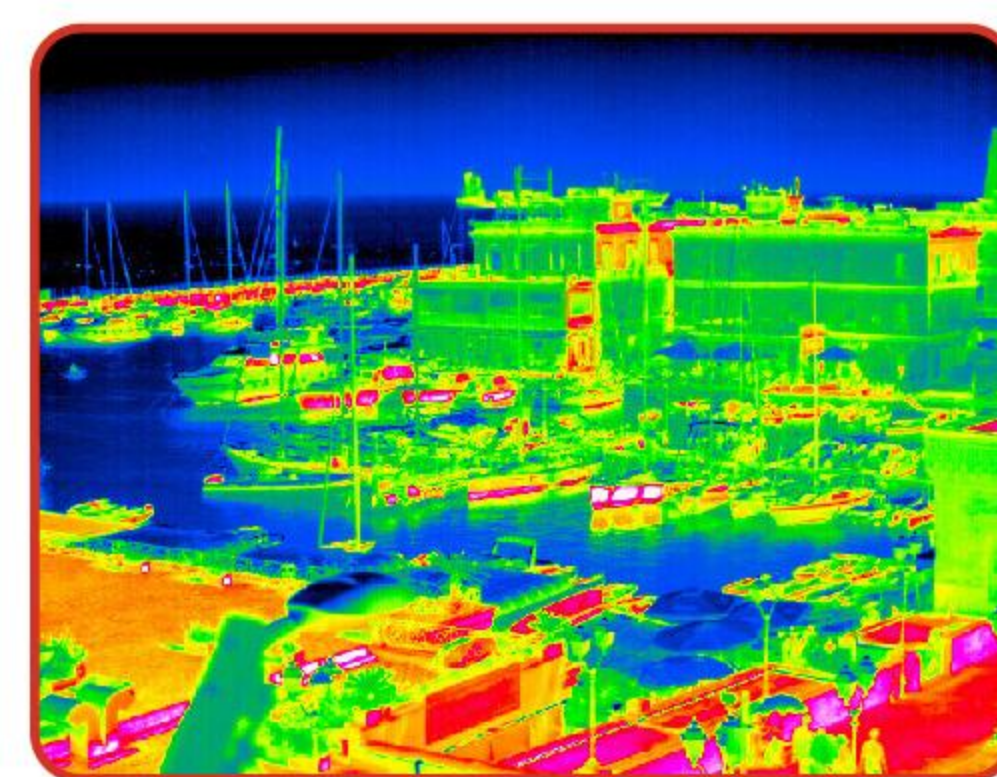
Construction Industry



Rail Transit



Laser welding



Security inspection

It is suitable for higher education and scientific research, power operation and inspection, petroleum and petrochemical, coal mining and metallurgy, construction industry, property inspection, insurance survey, rail transportation, traditional, large machinery, high-tech, laser, die-casting and other manufacturing industries.

TECHNICAL PARAMETER

DV type products	HDV44A25	HDV46A25
Thermal Imaging		
Response Band	7.5~14μm	
NETD (Noise Equivalent Temperature Difference)	<0.03°C (30mK) @25°C (77°F) , F#=1.0	
Field of view	18.7°H×14°V	24.8°H×18.7°V
Frame rate	50Hz	
Pixel size	17μm	
Spatial resolution (IFOV)	0.68mrad	
Detector Type	Vanadium Oxide Uncooled Detector	
Infrared detector resolution	480×360(172,800Pixel)	480×360(172,800Pixel)
Infrared image resolution	640×480(307,200Pixel)	
Super Resolution	960x720(691,200Pixel)	1280×960(1,228,800Pixel)
Thermal imaging lens focal length	25.0mm	
Focus Mode	Continuous Auto, Auto, Laser Assist, Touch Focus, Manual	
Focus speed	about 1s	
Minimum focusing distance	0.2m	
Lens Interchangeable	Magnifier (0.5X37.3° (H) x27.8° (V) 1X: 18.7° (H) x14° (V) 2X: 9° (H) x6.8° (V) 3X: 6° (H) x4.5° (V) Macrolens (20μm, 50μm)	Magnifier (0.5X: 50° (H) x37.3° (V) 1X: 24.8° (H) x18.7° (V) 2X: 12° (H) x9° (V) 3X: 8° (H) x6° (V) Macro lens (20μm, 50μm)
Lens recognition	automatic	
Aperture	F1.0	
Visible light		
Field of view	65°H×51°V	
Video resolution	960×720	
Visible light	3264×2448 (8MP)	
Focus Mode	Fixed focus	
Image resolution	Configurable: 2MP,5MP,8MP	
Image Display		
Display	5" capacitive touch screen, resolution 1280*720	
Image Mode	Thermal imaging, visible light, fusion, picture-in-picture, blending	
Screen brightness	Manual, automatic adjustment	
Lens rotation	180°	
Monitor rotation	90°	
Viewfinder	Built-in, 1024×768 pixels	
Digital zoom	1.0x~12.0xcontinuous	
False Color Mode	White heat, black heat, rainbow, iron red, red heat, fusion, rain, blue red	
Picture-in-Picture	The picture-in-picture size can be adjusted and the position can	
Fusion	Overlaying visible light details on thermal images be moved	
AGC	Automatic, manual, one-button AGC	
System Features		
Laser pointer	support	
Laser Distance Measurement	Indoor distance: 50m Outdoor distance: 15m	
Lighting	Support, white light	
Wi-Fi	802.11b/g/n (2.4GHz and 5GHz)	
Bluetooth	Support, Bluetooth 4.2	
Fingerprint unlocking	support	
USB	Support , USB Type-C interface	
HDMI	Support, HDMI-D interface	
Laser Class	ClassII, wavelength: 635nm; power <1mW	
location	Yes, all images support superimposing GPS, BDS, GLONASS or GALILEO location data	
Electronic compass	Support electronic compass direction indication	
Ledger	Support, used with Inspector client	
4G	Support , MicroSIM card	
Distance measurement accuracy	0.1m	
System Parameters		
weight	1490g (without lens, including battery)	
size	204.7mm×149.7mm×87.8mm (8.06" ×5.89" ×3.46")	
Operating temperature	-20°C~50°C	
Storage temperature	-20°C~60°C	
Relative humidity	≤95%	
Tripod Mount	UNC1/4" -20	
Shock/vibration	25g (GB/T2423.5-2019/IEC60068-2-27:2008) 2g (GB/T2423.10-2008/IEC60068-2-6:1995)	
Electromagnetic compatibility (EMC)	GB/T17799.2,GB17799.3 - 2012	
Temperature measurement and analysis		
Temperature measurement range	-40°C~150°C ; 100°C~650°C ; 300°C~2200°C ; Macro: -20°C~150°C	
Temperature measurement accuracy	-40°C~0°C: ±2°C or ±2% (Take the maximum value) 0~150°C: ±1°C or ±1% (Take the maximum value) 150°C~2200°C: ±2°C or ±2% (Take the maximum value)	
Temperature measurement point	Center point, highest temperature point, lowest temperature point	
Temperature measurement rules	Supports 10 points, 5 frames, 5 circles, and 1 line temperature measurement	
High temperature alarm	Sound alarm, light alarm, alarm temperature can be set	
Emissivity correction	Manual setting, setting range is 0.01~1.0, or select from the material emissivity	
Reflected temperature compensation	support	
Atmospheric correction	support	
Emissivity table	support	
Safety	IEC61010	
Partition emissivity correctionsupport	support	
External optical transmission correction	support	
Full screen emissivity correction	support	
Automatic temperature difference calculation	support	
Native analysis	support	
Data Storage		
Storage	Standard 64GB SD card, maximum support 128GB	
Number of image files	About 60,000	
Voice Annotation	Support 60 seconds voice annotation	
Image file formats	jpeg/thm.jpeg	
Text Annotation	Supports 255 character comments	
Video storage capacity	About 64h	
Video file formats	MP4/rv	
Fully radiometric infrared video streaming	support	
Battery Information		
powered by	Support fast charging, 12VDC/3A, 5VDC/3A	
Battery life	Battery can run continuously for 4 hours	
Charging time	2.5h@25°C	
Power Input	Charging station supports 100VAC to 240VAC, 50/60Hz	
Charging station	Support fast charging of charging stand	
Battery	Removable rechargeable lithium battery	