



30x
OPTICAL
ZOOM

800PX
THERMAL
RESOLUTION

W
WIRIS OS

35 MM
IR LENS

INTEL
FPGA

WORKSWELL WIRIS SECURITY SEARCH & RESCUE DRONE THERMAL CAMERA



Datasheet

Release date: 10th May 2019

Revision Number: 1.7

WIRIS Security technical specification

WIRIS Security Key feature specification	
800px Infrared UAV camera	800 x 600px IR sensor with 25 Hz frame rate (Worldwide shipping)
High sensitivity Night vision modes in visual Full HD camera	<p>Advanced Noise Reduction Technology</p> <ul style="list-style-type: none"> - filters noise from the image for clearer results in low-light conditions - the de-fog feature allows clearer viewing in foggy or misty scenes - when the feature is activated, the camera detects the haze level and automatically applies the required effects. <p>Auto IR-cut Filter Function</p> <ul style="list-style-type: none"> - in low-light conditions, the camera automatically switches from Day to Night vision mode - the IR-cut filter function allows to boost sensitivity for clear pictures in darkness. <p>Wide-D Image Processing Technology</p> <ul style="list-style-type: none"> - gives the ability to see clear, detailed images in high-contrast or backlit environments
Operating onboard system	<p>WIRIS OS for full real-time data streaming and control during the flight</p> <ul style="list-style-type: none"> - operating system ensures the full access to all camera functions - easy camera control via S.Bus, CAN bus, MavLink, RJ-45 or Trigger
30x Optical Antivibration zoom	Full HD 30x optical zoom camera with anti-vibration compensation
Thermal camera specification	
IR camera resolution	800 x 600 pixels
Scene range	-20 °C to +150 °C
Temperature sensitivity	Extra sensitivity of 0.04 °C (40 mK)
Frame rate	25 Hz or 9 Hz
Spectral range / detector	7.5 – 13.5 μm / Uncooled VOx microbolometer
Available lenses	35 mm (21.2° x 16.2°), visit FOV calculator
Digital zoom	1 – 12x continuous
Digital visual camera	
Resolution	1 920 x 1 080 pixels (Full HD), 1/2.8" EXMOR R CMOS sensor
Optical zoom	30x optical zoom with vibration compensation and image stabilization
Minimum illumination	0.0008 lux (ICR on, Slow shutter 1/4s, High sensitivity on)
View angle / Focal length	Ultra zoom 2.3° - extra wide 63.7° / 129.0 mm – 4.3 mm
Focus and exposure time	Autofocus with automatic or manual exposure time control
Image enhancement	Auto-white balance, WDR, IR cut filtering, DEFOG, 3D Noise reduction
Memory and data recording	
Memory	Internal high-speed SSD 256GB or 512GB for image and video recording External slot for Micro SD card & USB 2.0 for USB stick for taking images



