
Product Introduction: Thermal-Resistant Infrared Reconnaissance Camouflage Clothing

1. Brief Introduction

Product Name: Thermal Infrared Detection Camouflage Clothing

Product Model: LF-WZF-01

This type of camouflage suit is primarily composed of specialized material with a leaf-like appearance. It is available in three color variants tailored to different battlefield environments—desert, snowfield, and woodland—and features two structural designs: split-type and cloak-type.

This product effectively resists optical infrared thermal imaging reconnaissance, addressing the concealment challenges faced by soldiers. Compared to pure thermal insulation camouflage garments and phase-change thermal storage camouflage garments, this product exhibits superior breathability and heat dissipation, ensuring comfortable wear. It demonstrates outstanding characteristics: seamless integration into the environment at all times, sustained effectiveness against thermal imaging reconnaissance even during prolonged concealment, and reliable concealment performance across all testing modalities.



Figure 1 Thermal Infrared Reconnaissance Camouflage Uniforms for Forest and Desert Environments

2. Product Performance Testing Results

This product has participated in multiple competitive evaluations organized by various institutions, consistently demonstrating superior thermal infrared camouflage performance in all tests.

2.1 A Comparative Test Organized by a Foreign Trade Company

The LF-ZWF-01 jungle camouflage suit was compared with other camouflage suits procured by the company. Testing was conducted using a drone-mounted electro-optical pod.

- 1) Test distance: 50–100 m;
- 2) The test personnel wore three types of camouflage uniforms and were imaged within the same field of view, with the LF-WZF-01 positioned in the center.
- 3) The thermal imaging images obtained during testing are shown below, where the red arrow indicates LF-WZF-01. The results demonstrate that LF-WZF-01 exhibits excellent background blending performance, significantly outperforming competing products.



Figure 2: Comparison Photos of a Foreign Trade Company

2.2 A Military Unit Conducted a Comparison Test.

In September 2025, a military unit employed long-wave thermal imagers to conduct close-range imaging comparisons of camouflage performance.

The results are shown in Figure 3, with the sample conditions as follows:

- ①Nos. 1 and 2 are cloak-style LF-WZF-01 camouflage uniforms;
- ②Number 3 represents a standard camouflage uniform;

③Number 4 represents the existing military uniform of the unit.

④Nos. 5 and 6 are the split-type LF-WZF-01 camouflage suits.

Test results demonstrate that the LF-WZF-01 camouflage suit significantly outperforms competing products in resisting infrared thermal imaging reconnaissance.

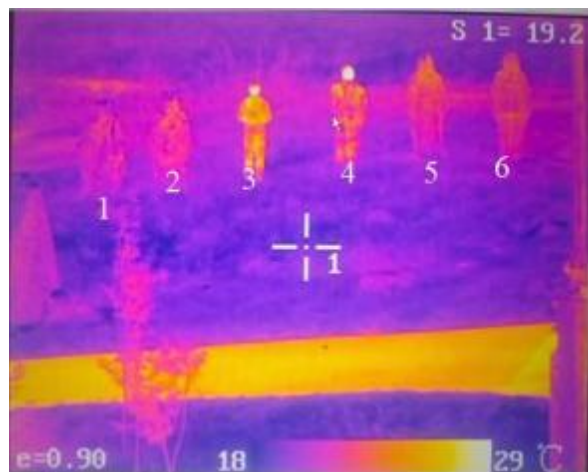


Figure 3: Comparison Photo of a Certain Military Unit

2.3 Comparison of Products of the Same Type

对比项目	市售普通伪装服	市售对抗热成像伪装服	麓风伪装服	备注
对抗热红外成像侦察能力	不能对抗热像仪侦察	采用隔热材料，长效时间潜伏热源	可以对抗热红外成像侦察，环境温差大，成像原理，无论长短，均有出色效果	解决了伪装问题，麓风能领先
装饰材料性能	采用传统染色条等	普通涂层，有限隔热	采用自研伪装专用涂层，符合GJB1082要求，牢度等机械物理性能符合GJB7927要求	麓风采用专业伪装材料

Figure 4 Comparison of Products of the Same Type

Real-Scene Simulation Display



2.4 Thermal Imaging Camera

Thermal imaging sensor type: DJIMatrix 4T – Uncooled vanadium oxide (VOx). Do not direct the thermal camera lens toward high-energy sources such as sunlight, lava, or laser beams, as this may burn the sensor and cause irreversible damage.

Resolution:DJIMatrice 4T:640x512

Pixel spacing: DJIMatrix 4T:12 μm

Frame Rate:DJIMatrice 4T:30Hz

Lens:DJIMatrice 4T FOV: 45°|Equivalent focal length of DJIMatrice 4T:53 mm Aperture of DJIMatrice 4T: f/1.0|

Focal Distance: 5 meters to infinity

Sensitivity:DJIMatrice 4T:50 mk@ F1.0

Temperature measurement methods:DJIMatrice 4T: Point temperature measurement, Area temperature measurement

Temperature range:DJIMatrice 4T: -20°C to 150°C (High Gain Mode)
0°C to 550°C (low gain mode)

Color Palette:DJIMatrice 4T:

Hot White, Hot Black, Red Dye, Iron Red, Hot Iron Ratio, Medical Lava Rainbow 1, Rainbow 2 **Photo Format:** DJI Matrix 4T: JPEG (8-bit), R-JPEG (16-bit)

Video Resolution:DJIMatrice 4T:1280×1024 at 30 fps (super-resolution enabled, night mode off); otherwise: 640×512 at 30 fps

Video Bitrate:DJIMatrice 4T:

6.5Mbs(H.264640512@30fps)|5Mbs(H.265640512@30fps)12Mbps(H.2641280x1024@30fps)8Mbps(H.2651280x1024@30fps)

Video Format:DJIMatrice 4T: MP4

Photography Mode:DJIMatrice 4T:

Single-shot: 1280×1024/640×512|Timed shot: 1280×1024/640×512 JPEG: 0.7/2/3/5/7/10/15/20/30/60 seconds

Photo Resolution:DJIMatrice 4T

Infrared resolution: 1280×1024 (Super Resolution enabled) /

640512 (Super Resolution disabled)**Digital zoom:** DJIMatrix 4T – 28x

Infrared wavelength:DJIMatrice 4T:8 μm to 14 μm

Infrared temperature measurement accuracy:DJIMatrice 4T: High gain: 2°C or 2% (use the higher value)
DJIMatrice 4T: Low gain: 5°C or 3% (use the higher value)

3. Durability Test Report



化学工业合成材料老化质量监督检验中心
240014340120



The Quality Supervision and Inspection Center of Synthetic
Material Ageing of Chemical Industry



中国认可
国际互认
检测
TESTING
CNAS L1135

检测报告 Test Report

No. TL25080349

共 3 页 第 1 页

样品名称 Name of Sample	伪装服用涂层布	样品编号 Sample Number	T25080103
委托单位 Client	湖南麓风科技有限公司	检测类别 Classification of Test	委托检测
生产单位 Manufacturing	湖南麓风科技有限公司	生产批号 Batch Number	—
送样日期 Sampling Date	2025年8月11日	生产日期 Production Date	—
检测日期 Test Date	2025年8月19日	型号/商标 Type/Trademark	—/—
样品数量 Sample Numbers	1 批涂层布料	合同编号 Contract Number	T25080103
检测项目 Test Item	见检测项目及结果页	样品描述及说明 Description and Explanation of Sample	涂层布料，完好
检测依据 Test Method	GB/T 3920-2008 《纺织品 色牢度试验 耐摩擦色牢度》		
检测结论 Result	该样品按照GB/T 3920-2008 《纺织品 色牢度试验 耐摩擦色牢度》进行检测，所检项目检测结果符合委托方提供的指标要求。 (检测单位专用章) 签发日期 2025年8月20日 检验检测专用章		
备注 Remark			

批准：
Approved by

李欣

审核：
Inspected by

范星

主检：
Tested by

谭卓华

老化
★
检测