

Modified Full-Spectrum Nikon D800 Camera

Technical Data Sheet

1. Product Overview

Professional DSLR converted for ultraviolet (UV), visible (VIS), and infrared (IR) technical photography. Removal of the internal UV/IR cut filter provides full-spectrum sensitivity (300–1100 nm), supporting cultural heritage diagnostics and scientific imaging. Cost-effective alternative maintaining analytical reliability within CHSOS workflows.

2. Sensor & Optical Specifications

- Base Camera: Nikon D800 (full-frame DSLR)
- Sensor: FX-format CMOS – 36.3 MP
- Spectral Range: 300–1100 nm (UV–VIS–IR)
- Modification: Removal of UV/IR cut filter
- Lens Mount: Nikon F-mount

3. Imaging Capabilities

- UVR, UVF, VIS, IR, IR false color
- Multispectral imaging workflows

Equivalent technical photography datasets to the D850 when used with standardized CHSOS filters and protocols.

4. Core Features

- High dynamic range RAW performance
- ISO 100–6,400 (expandable)
- 51-point AF system – EXPEED 3 processor

5. Applications

- Art conservation imaging
- Technical & multispectral photography
- IR reflectography & fluorescence studies
- Scientific documentation

6. Notes

External band-pass filters required. Designed for calibrated, controlled technical workflows.