

» CFT

Compact Field Tester



CFT-IR units



CFT-VIS-3 unit with resolution target

The **CFT** units are compact, lightweight, self-contained camera test system. They are available for testing in the IR or in the Visible spectral ranges. The **CFT** units can be used both at a lab or outdoors and are adapted for field conditions.

The **CFT-IR** models are infrared test systems. The **CFT-VIS** models are visible camera test systems. They house a lens based (refractive) collimator, energy source (blackbody or visible light source) and one or more targets, all in one compact unit.





» Features for CFT-IR units

- ▶ Portable, compact and lightweight
- ▶ Four differential temperatures set by the user
- ▶ Motorized / manual target wheel with five targets
- ▶ Automated calibration traceable to NIST
- ▶ Ethernet or RS232 communication for temperature and target wheel remote control
- ▶ Full MRTD testing with a PC interface (optional)

» Features for CFT-VIS units

- ▶ Portable, compact and lightweight
- ▶ The CFT-VIS models can project a variety of visible targets
- ▶ Variable visible light sources are available

» SPECIFICATIONS

Model:	IR Spectral Band		Visible Spectral Band	
	CFT-IR-2	CFT-IR-5	CFT-VIS-2	CFT-VIS-3
Spectral band (2)	3-5 μm or 8-12 μm	3-5 μm or 8-12 μm	400-1000nm	400-1000nm
Clear Aperture	\varnothing 48 mm (1.9")	\varnothing 125 mm (4.9")	50.8 mm (2")	75 mm (2.95")
Effective Focal Length	250 mm (~ 10")	500 mm (~ 19.7")	200 mm (~ 8")	500 mm (~ 20")
Field of View	4°	2°	1°	5.6°
Resolution	"5.0 cy/mrad @ 3-5 μm , 3.5 cy/mrad @ 8-12 μm "		45 cy/mrad	66 cy/mrad
Transmission	90% Average		95% Average	
Blackbody Differential Temp.	-5 °C to +20 °C		NA	
Blackbody Accuracy	"± 0.05°C (minimum) or ±0.01 x T (whichever is greater)"		NA	
Blackbody Stability	±0.01°C	±0.01°C	NA	
Illumination Uniformity	NA		>90%	
Weight	3.5 kg	4.8 kg	2 kg	10 kg
Size [mm]	430L x 170W x 220H	452L x 193W x 216H	\varnothing 61dia. x 280L	498L x 130W x 160H
Operational Temperature	-20 to +50°C	-20 to +40°C	-10 to +35°C	-20 to +50°C
Storage Temperature	-40 to +70 °C			
Input Power	20-30 VDC			
Images (for use reference only)				
	CFT-IR-2	CFT-IR-5	CFT-VIS-2	CFT-VIS-3

Notes:

- (1) Please contact CI-Systems for additional variations on the CFT units
- (2) Spectral band for the CFT-IR units can be either 3-5 or 8-12 (upon request)
- (3) Up to four selectable differential temperatures for the CFT-IR units are available for the user. These temperatures can be set by a friendly user PC interface.
- (4) Up to x5 user defined targets can be integrated in CFT-IR units. Target wheel can be manual or motorized (upon request).
- (5) For accurate MRTD testing, the CFT-IR units need to disassemble and transport the FLIRs and sights to the lab. The CFT-IR 's embedded software uses an algorithm to ensure that CFT emits the same radiance regardless of ambient temperatures.
- (6) One target can be fixed in the CFT-VIS units. Target definition is user defined
- (7) For CFT-VIS units battery operation is limited to LED sources only
- (8) Optional for CFT-VIS-3 model (upon request):
 - With SR300N Integrating sphere high uniform source or with visible LED based
 - RS232 communication for SR300N integrating sphere luminance control
 - Equipped with interface for tripod
- (9) Mechanical Interface of CFT to UUT can be manufactured by CI-System upon request