

Security/Public Safety

Cadet75



Thermal Imaging Solutions Since 1976



DiOP

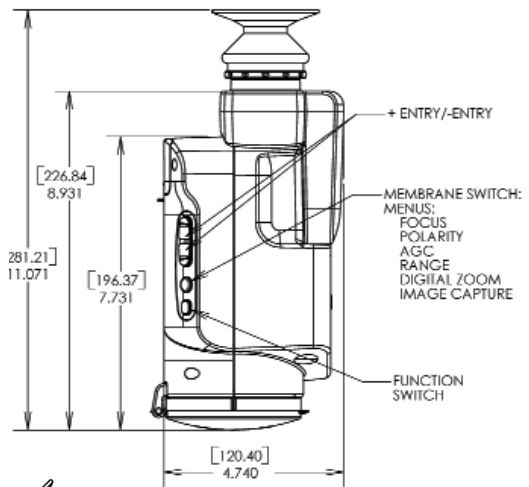
Hand Held Thermal Imaging Camera

The DiOP Cadet75 is by far the most versatile handheld thermal imager available. Low cost, lightweight, and compact, it offers a full performance solution to public safety needs.

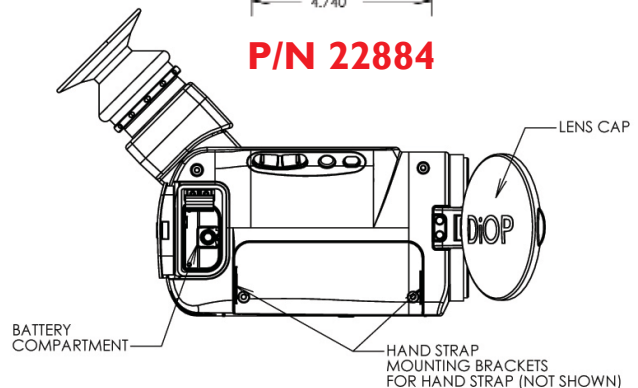
Integrating the features of a large camera with the flexibility and convenience of a handheld, the Cadet75 utilizes the advanced uncooled microbolometer technology in a full size 320 x 240, 51µm pitch focal plane array. The latest developments in design and application of thin film technology provide the best transmission performance possible, and the use of the latest lens technology in the on-board 640 x 480 display ensures comfortable viewing over extended time periods. The Cadet75 incorporates such large camera features such as 2x electronic zoom and remote control capability over an RS232 link, yet includes a built-in battery charger to guarantee the ultimate in mobility and endurance.

Like no other thermal hand held imager, the Cadet75 offers an optional visible channel for recording of events for legal evidence, along with a live audio channel. An optional on-board image capture capability enables further instant documentation.

Since 1976 DiOP has provided industry-leading equipment to the security and public safety sectors. DiOP's proprietary optical design, state-of-the-art laboratories, and vertically integrated manufacturing capabilities ensure maximum performance and dependability. DiOP products guarantee a world class solution to your thermal imaging needs.



P/N 22884



Features Include:

- ◆ 2x Digital Zoom
- ◆ Lightweight and Compact
- ◆ Built-in Battery Charger
- ◆ Remote Control Capability
- ◆ Video/Audio Out
- ◆ Optional Visible Channel
- ◆ Optional Image Capture

The Lens The Electronics The Solution

System Specifications

Part Number	22884
Video Format	CCIR601 NTSC or PAL-M
Audio	
Microphone Sensitivity	-44dB
Output	s/n 58dB, Preamp Gain 10x
Frame Rate	60 Hz
Serial Interface	RS-232
Power Requirements	4-12V DC <4.5 watts typical @ steady state, 25°C
Battery	
Type	DiOP Smart Pack, 7.2V, 2200mAh, equivalent replacement Sony NP-F550
Run Time	2.5-3 Hours
Charger	Internal
Alternate Power Input	Yes
Environmental	IP65 standard, IP67 optional. -20°C to +50°C
Battery Compartment	IP67 standard
Camera Controls (Thermal Only)	Inverse Polarity, Focus, AGC on/off, 2x Electronic Zoom, Close Image Enhancement, optional Image Capture
Display	KOPIN 640x480 Active Matrix with CyberLens 640, 32° field of view, 25mm eye relief
Viewing	Light leak-proof eye-cup, with diopter adjustment
NEDT	< 80mK
Mounting	¼ -20 Tripod Interface
Weight	<1.25 kg
Color	standard: Black optional: Green, Sand



Standard Cadet75 kit (p/n 22884-600)

- ◆ Hard Carry Case
- ◆ Hand Strap
- ◆ Battery Charger
- ◆ RS232 Interface cable with DB9 connector
- ◆ Audio and Video Output Cables, (RCA Type)
- ◆ 2 DiOP Smart Battery Packs
- ◆ Lens Cleaning Pack
- ◆ AC-DC Power Supply (110V-220V)
- ◆ Vehicle Power Adapter
- ◆ Operator's Manual

Optional Equipment/Software

- ◆ Optional Interchangeable Lenses
- ◆ Image Capture Software
- ◆ GUI Remote Control Software
- ◆ Visible Camera Channel

Sensor Specifications

Thermal

Detector	320 x 240 VOx Uncooled Microbolometer FPA, 51µm pitch
Spectral Band	7-14µm
Detector MTBF	10,000 hours

Visible(optional)

Type	1/4-CCD, 512H x 492V pixels
Resolution	300 lines
Frame Rate	60 Hz
Sensitivity	5 lux

Optical Characteristics

Thermal

Spectral Range	7-14µm
f/#	1
EFL	75mm
Field of View	12.5° x 9.5°
Type	Motorized

Visible(optional)

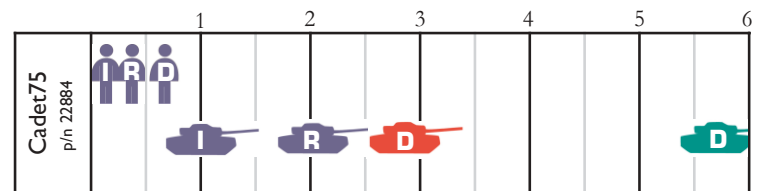
Field of View	Matches thermal channel within 1°
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Range Performance

D= Detection **GREEN** = Good Conditions
R= Recognition **RED** = Poor Conditions
I = Identification **BLUE** = Same in all conditions

= Target Size (1x1m) = Target Size (8x8m)

Range in Kilometers



Call us at 603.898.1880 or visit
our website www.DiOP.com for
more information!