

# HHC100™ Series Handheld Thermal Imagers



MicroIR® Technology

## Innovating for the future

Innovative designs, a state-of-the-art manufacturing facility and a dedication to product quality are what allow BAE Systems' IR Imaging Systems (IRIS) to provide the most advanced uncooled infrared products.

As the dominant supplier of microbolometer sensors, IRIS is able to leverage state-of-the-art, in-house sensor technology in the development of high performance, low cost thermal imaging systems. This has resulted in a robust

product offering, capable of meeting the most demanding requirements of the commercial and government end users.

At BAE Systems' IR Imaging Systems, we are committed to assuring our products exceed your every expectation.

## HHC100™ Series handheld thermal imagers

Designed to meet the needs of the law enforcement professional, the HHC100 Series ruggedized handheld thermal imagers deliver unprecedented infrared (IR) imaging performance in a self-contained ergonomic package. Near instant-on, automatic image optimization and a removable eyecup are just a few of the features that demonstrate the attention to detail behind the design.

Whether you're tasked with conducting day/night perimeter surveillance, searching for contraband or locating a missing person, the HHC100 Series ensures your mission success.

### MicroIR® technology

Based on our MicroIR® technology, the HHC100 Series thermal imagers generate superior image quality over an extended operating temperature range, with the wide dynamic range (14 bit) and real time 60Hz frame rate you have come to expect from BAE Systems. Regardless of your environment, MicroIR® technology can be relied upon to convert the heat (IR energy) from the scene into a quality, real time IR image, independent of darkness, smoke and other common obscurants.

### Flexible form factor

The modular design of the HHC100 Series allows the imagers to be configured to meet the challenging mission requirements encountered by the law enforcement professional. They can be outfitted with the optional light blocking eyecup assembly for covert night missions, or simply remove the eyecup, add the pistol grip, and the imager is configured for handheld, direct view imaging.

No other imager offers this degree of configuration versatility as a standard feature set, at an affordable price.



## Features

### 1. Ergonomic control interface

Weatherproof function buttons with tactile feedback  
Ergonomically positioned for one hand (left or right) operation

### 2. Optic

HHC100 - 10 degree horizontal field of view  
HHC150 - 12 degree horizontal field of view  
Motorized focus

### 3. Input/output ports

RS-170 analog video output  
RS-422 serial communication I/O port and external power input

### 4. 1/4 x 20 mounting provision

### 5. Removable battery cartridge

Holds either six (6) AA batteries or single rechargeable NiMH battery  
Easy load cartridge assures proper polarity alignment

### 6. High resolution 2.5" TFT LCD display

Exceptional view angle for simultaneous viewing by multiple persons  
Back lit for day time viewing  
Accepts light blocking eyecup



## Technical specifications

Detector	HHC100™	HHC150™
Detector type	Uncooled VOx microbolometer	Uncooled VOx microbolometer
Spectral response	8 – 14 μm	8 – 14 μm
Array size	160 x 120	320 x 240
Detector pitch	46 μm	28 μm
<b>Video</b>		
Frame rate	60 Hz	60 Hz
Analog video output	RS-170	RS-170
<b>Features</b>		
Gain/level adjustment	Automatic	Automatic
Image polarity	White hot/black hot	White hot/black hot
Pseudo Color	User selectable	User selectable
Display brightness	User adjustable	User adjustable
<b>Communication interface</b>		
422 serial interface	Full camera control	Full camera control
<b>Electrical</b>		
Battery power	(6)-AA or single NiMH rechargeable	(6)-AA or single NiMH rechargeable
Battery operating time	>3 hours	>3 hours
AC operation	AC adapter 120/240 VAC, 50/60 Hz	AC adapter 120/240 VAC, 50/60 Hz
Power conservation	Stand-by mode	Stand-by mode
<b>Mechanical</b>		
Weight	1.4 kg (3 lbs)	1.4 kg (3 lbs)
Dimensions - LxWxH (nominal)	18.3x10.7x8.9 cm (7.2x4.2x3.5 in.)	18.3x10.7x8.9 cm (7.2x4.2x3.5 in.)
Tripod mounting provisions	1/4" x 20	1/4" x 20
<b>Environmental</b>		
Operating temperature range	-20 to +70°C (-4 to 158°F)	-20 to +70°C (-4 to 158°F)
Encapsulation	IP67	IP67
<b>Optics</b>		
Horizontal field of view - HOV (nominal)	10°	12°
Focus	Motorized	Motorized

Specifications are subject to change without notice.

This product requires export approval from the U.S. Government prior to delivery.

## Standard package



HHC100 or HHC150 thermal imager

Pistol grip

Display visor

Light blocking eye cup

Hand and neck straps

Rechargeable NiMH battery

AA battery cartridge

AC power supply/charger

User manual

Cables

Shipping and carrying case

FOR MORE INFORMATION CONTACT:

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## Meeting your application requirements

- Surveillance
- Fugitive pursuit
- Search and rescue
- Drug interaction
- Structure profiles
- Vehicle surveys

