

# Hydra-F6™: A Fully Rugged, Customizable Tablet, Featuring a Low-Power, Sunlight Readable Display



5.92"  
150.4mm

8.42"  
213.9mm

## Features

- ◆ Single, dual or quad-core Cortex-A9 Freescale i.MX 6 processor
- ◆ 7" WSVGA, sunlight-readable display with touchscreen, brightness control and automatic display rotation
- ◆ MIL-SPEC: MIL-STD-810G, MIL-STD-461F, and IP67
- ◆ Customizable and fully programmable, with four user buttons, volume buttons and power button
- ◆ 802.11 b/g/n, Bluetooth 2.1, GPS, optional Verizon LTE broadband
- ◆ 5MP camera, digital microphone and speaker outputs
- ◆ .98" (24.9mm) thick
- ◆ Gloved operation in all weather conditions

For jobs that demand fast performance, multi-display support, and the ruggedness to survive the harshest environments, InHand has developed the Hydra-F6 rugged tablet. Utilizing the multi-core Cortex-A9 i.MX 6 processor from Freescale and a revolutionary low power, sunlight-readable display, the Hydra-F6 was created for OEMs and system integrators requiring a quick solution for military, medical, or other industrial or commercial uses. The fully rugged tablet offers the versatility and portability of a consumer tablet with the durability and long production life of a MIL-SPEC mobile device.

The InHand Hydra-F6 meets all specifications for temperature, fluid contaminants, solar radiation, fungus and immersion, while offering the full functionality expected from a compact mobile tablet. The tablet design features a 7" WSVGA, sunlight-readable display with automatic brightness control and display rotation. A resistive multi-touch Gorilla Glass® touch panel, four programmable buttons, volume buttons and a power button make up the user interface. Features include: camera, microphone, stereo speaker output, haptic feedback and Qi wireless battery charging of the 37Whr 3.7V Lithium Polymer battery. The low-power design can run up to 8 hours on a full charge and weighs less than 25 ounces.

The system's expansion dock connector enables external connections via USB, DC power input, HDMI, SATA, and Gigabit Ethernet, and RS-232. The Hydra-F6 is available as a commercial off-the-shelf (COTS) tablet or with InHand's full range of design services to customize it for application-specific needs. Options include alternative display sizes, camera resolutions, peripherals, docking solutions, operating systems, configuration lock-down, security features, and centralized asset tracking. Fully custom tablets may be private labeled with enclosures of alternate sizes, colors, shapes, buttons, external connections, materials, and design to meet project requirements.

## Hydra-F6™ Specifications

<b>CPU</b>	Freescale™ i.MX 6 Cortex-A9 processor, 1GHz (single, dual and quad-core available) via InHand Fury-F6 or Siren-F6 SBC
<b>Memory</b>	Up to 4GB DDR3; up to 32GB eMMC Flash
<b>Display</b>	7" WSVGA (1024x600) sunlight-readable display
<b>Display Features</b>	Ambient light sensor for automatic brightness control and accelerometer for automatic display rotation; sunlight readable; resistive multi-touch Gorilla Glass® touch panel
<b>User Interface</b>	4 user buttons, volume and power buttons; analog resistive multi-touch touchscreen
<b>Audio</b>	Stereo speaker output, digital microphone for audio capture/detection
<b>Video</b>	5MP camera (for barcode scanning; image capture)
<b>Multi-Media</b>	Video decode: H.264, 1080p 30 fps; Video encode: H.264, 1080p 30 fps
<b>Wireless Peripherals</b>	802.11 b/g/n WiFi, Bluetooth 2.1 and GPS, Verizon LTE*
<b>Expansion Dock / Connector</b>	2 USB 2.0 ports, 1 USB 2.0 Client port, power input, I2C/SMBus, SPI, CANBus, 10/100/1000 Ethernet, HDMI, SATA
<b>Additional Features</b>	Vibrator for haptic feedback; hand straps; customizable with logo, digital compass, barometer
<b>Battery Support</b>	37WHr 3.7V Lithium Polymer battery with Qi wireless charging; est. 8-10 hours of battery for typical usage
<b>Operating Systems</b>	Android Jelly Bean 4.2.2; contact factory for Windows® Embedded or Linux
<b>Dimensions</b>	213.9mm x 150.4mm x 24.9mm, 8.42" x 5.92" x 0.98"
<b>Weight</b>	698grams, 24.4 ounces
<b>Environmental</b>	-35°C to 75°C operating temperature, IP67 submersible to 1 meter for 30 minutes
<b>MIL-SPEC</b>	MIL-STD-810G, MIL-STD-461F
<b>MIL-SPEC Tests</b>	Method 501.5, Procedure II, temp = 70°C (high temp), Method 502.5, Procedure II, temp = -35°C (low temp), Method 504.1 Procedure II, fluids from table 504.2, 8 hour exposure (fluid contaminates), Method 505.5, Procedure I for world-wide deployment (solar radiation), Method 508.6, 28 minimum growth (fungus), Method 512.4, Procedure I, at 27°C ambient air temperature above water temperature at a depth of 1m for 30 min. (immersion), Method 514.6 Procedure I (Category: 4, 24) and Procedure II (various vibration), Method 516.6, Procedure I, 40g, 11ms, saw-tooth, 3 shocks +/- per axis, 3 axes (shock), Method 516.6, Procedure IV, up to 48" drop, 26 total drops (transit and operating drop)

## Ordering Information

Part Number	Description						
HYD-F6-01	Hydra-F6 Tablet, i.MX6 Single Core 1.2GHz, 1GB DDR3, 16 GB eMMC, 1024x600 7" Pixel Qi						
HYD-F6-02	Hydra-F6 Tablet, i.MX6 Dual Core 1.2GHz, 1GB DDR, 16GB eMMC, 1024x600 7" Pixel Qi						
HYD-F6-04	Hydra-F6 Tablet, i.MX6 Quad Core 1.2GHz, 1GB DDR, 16GB eMMC, 1024x600 7" Pixel Qi						
<i>Options:</i>	<table border="0"> <tr> <td>5C: 5MP Camera</td> <td>2GB: 2GB DDR3</td> </tr> <tr> <td>W: WiFi, Bluetooth, GPS</td> <td>4GB: 4GB DDR3</td> </tr> <tr> <td>32GB: 32GB eMMC</td> <td>VL: Verizon LTE</td> </tr> </table>	5C: 5MP Camera	2GB: 2GB DDR3	W: WiFi, Bluetooth, GPS	4GB: 4GB DDR3	32GB: 32GB eMMC	VL: Verizon LTE
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InHand Electronics, Inc. is an original design manufacturer of single board computers and rugged handhelds for original equipment manufacturers. InHand's products are used in a variety of markets including: military, healthcare, industrial, entertainment, and instrumentation. Designs include: UMPCs, PDAs, wearable computers, tablets, handheld control systems, industrial computers and smart sensors. InHand's products are built on industry-leading technologies such as: Freescale, Intel, Texas Instruments, and Marvell processors and Android, Linux, Ubuntu, and Microsoft operating systems. InHand is an ITAR registered company. InHand products are designed and assembled in the USA. The company's headquarters are located along the I-270 Technology Corridor in Rockville, Maryland.



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