

# HYDRUS<sup>®</sup>

BY LAND. BY SEA. UNPRECEDENTED.



## ~ FEATURES

- 320 x 240 Landscape QVGA with Integral Touch Screen, "Super-Sunlight" readability outdoors and indoors
- Marvell XScale<sup>®</sup> PXA270 Processor - 624MHz
- 256MB SDRAM Standard
- 2GB FLASH (up to 32GB)
- IP67/IP68 Rated for protection against dust and water
- Drop and Shock Protected
- Integrated WLAN 802.11b/g and Bluetooth<sup>®</sup>
- Dual Smart Battery System 40+ Hours Battery Life\*
- 5MP True-Camera-System captures color images and bar codes with auto focus and illumination
- 55-Key Alpha-Numeric Keypad plus joystick control
- PACK Optional: Your design or ours
- Completely Customizable

\*actual time may vary based on a variety of conditions

Designed to work long hours in the harshest environments, **HYDRUS<sup>®</sup>** is the Ultra Rugged, powerful, "field application perfected" addition to Two Technologies line of hand held computers.

HYDRUS sets a precedent for all other hand held computers with the longest battery life and rugged design features; far exceeding industry standards. Combined with a 5MP color imager and illumination, power, proof and productivity have never been so readily available. All in one package.

Affordable and intuitive operation defines Two Technologies' value added proposition — true differentiation. HYDRUS exceeds industry standards by taking intuitive operation one step further; offering affordable application specific keypad graphics in days, not weeks.

When application and environment dictate the industry's most durable and flexible option, depend on Two Technologies' twenty plus years of experience in designing rugged hardware for demanding applications. Put HYDRUS to the test, we did.

## WHEN FIELD TIME TURNS INTO OVERTIME...HYDRUS.

**Ergonomic Case** ~ Designed for easy data entry via keypad or touch screen, HYDRUS is comfortable to hold and operate even during long hours in the field.

**Double Wall Case** ~ Case construction provides impervious sealing of the case halves with additional drop protection for internal components. The case is constructed of GE Xenoy<sup>®</sup>, one of the most durable, chemical-resistant materials available.

**Custom Keypad Graphics** ~ Custom keypad graphics can be printed quickly which allows for prototyping and efficient product testing.

**Joystick Key** ~ This patent pending design minimizes accidental presses of the 8 switches around the joystick. This allows for individual or combined operations giving the operator precise directional control.



**Individual Hard Keys** ~ Keypad is uniquely designed with shear-proof solid hard keys for easy operation with gloved hands.

**LED Indicators** ~ LED Lights are encased and slightly raised allowing them to be seen from a wider viewing angle.

**Integrated Speaker and Microphone** ~ Speaker and microphone are positioned such that the device can be held like a phone for voice communications.

**Audio Bridge Circuitry** ~ Enables simplified routing of audio signals to and from the speaker and microphone to a variety of specified locations.

**Dual Smart Battery System** ~ Both batteries have a charging circuit and "gas gauge" to monitor battery condition during charging and discharging. Sensors beneath the battery door assure that the batteries are properly secured.



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## ~ SPECIFICATIONS

<b>OPERATING SYSTEM AND PROCESSOR</b>	<ul style="list-style-type: none"> <li>Microsoft® Windows® CE 5.0</li> <li>Marvell XScale® PXA270 Processor - 624MHz</li> <li>Real Time Clock with rechargeable Lithium Back-up</li> </ul>
<b>MEMORY &amp; MASS STORAGE</b>	<ul style="list-style-type: none"> <li>2GB Internal FLASH Storage (expandable to 32GB or higher optional)</li> <li>256MB SDRAM Standard (30MB+ used for OS)</li> </ul>
<b>INTERFACE</b>	<ul style="list-style-type: none"> <li>One RS-232 Serial Port standard</li> <li>Mini USB 1.1 A/B (Host and Client) Full Speed</li> </ul>
<b>WIRELESS CONNECTIVITY</b>	<ul style="list-style-type: none"> <li>SDC-MCF10G Radio - Summit Data Systems™ (Wi-Fi CERTIFIED™, Certified for WPA-Personal, WPA-Enterprise, WPA2-Personal, and WPA2-Enterprise- Certified for Cisco Compatible Extensions Version 4 (CCX V4))</li> <li>Bluetooth® - Class 2 Version 1.2</li> <li>Integrated Internal Antennas</li> </ul>
<b>BATTERIES AND POWER MANAGEMENT</b>	<ul style="list-style-type: none"> <li>World's largest battery capacity of 36 WATT-hours</li> <li>40+ hours typical operational time*</li> <li>3 hour recharge time*</li> <li>Smart Battery System</li> <li>Dual Lithium Ion Extended Capacity Rechargeable Batteries 5000 mAh, 7.4V</li> <li>Recharge/line power: 12 to 18 VDC, 36 WATTS</li> </ul> <p>*actual time may vary based on a variety of conditions</p>
<b>ENVIRONMENT</b>	<ul style="list-style-type: none"> <li>Storage temperature: -20° to +60°C (no batteries installed) (MIL-STD 810F Method 502.4, MIL-STD 810F Method 501.4)</li> <li>Operating temperature: -20° to + 50°C (MIL-STD 810F Method 502.4, MIL-STD 810F Method 501.4)</li> <li>Charging temperature: 0° to + 40°C</li> <li>Humidity: 5-95% (non-condensing) (MIL-STD 810F Method 507.4)</li> </ul>
<b>DISPLAY</b>	<ul style="list-style-type: none"> <li>320 X 240 Landscape QVGA with Integral Touch Screen, "Super-Sunlight" readability outdoors and indoors</li> </ul>
<b>KEYPAD</b>	<ul style="list-style-type: none"> <li>55-key alpha numeric keypad plus joystick</li> <li>Shear-proof solid hard keys</li> <li>"Real-Feel" keyboard technology</li> <li>Glove and weather friendly ergonomics</li> <li>Fully customizable for intuitive operation</li> </ul>
<b>STYLUS HOLDER</b>	<ul style="list-style-type: none"> <li>Integrated into lower boot</li> </ul>
<b>RUGGEDNESS</b>	<ul style="list-style-type: none"> <li>Water Immersion and Dust Protection: IP68 - Beyond IP67 for ultra-rugged environments, IP67 - water-tight, IP66 - high pressure water, IP6X - dust tight, 8 hours continuous 75um particles</li> <li>Drop and Shock Protection: 26 drops 1.2m all faces, corners and edges per MIL-STD 810F Method 516.5 IV</li> </ul>
<b>REGULATORY</b>	<ul style="list-style-type: none"> <li>FCC Part 15</li> <li>CE</li> <li>IC</li> <li>RoHS Compliant</li> <li>WEEE</li> </ul>
<b>DEVELOPMENT TOOLS</b>	<ul style="list-style-type: none"> <li>Development Environments: Visual Studio® 2005 (Visual C#®, Visual C++®, Visual Basic®, Supports .NET CF 2.0)</li> <li>HYDRUS Developers Kit: Manuals, SDKs, Utilities for device specific features and functions, code examples</li> <li>eye•WARE™ Software Suite</li> </ul>
<b>ENHANCED SOFTWARE OPTIONS</b>	<ul style="list-style-type: none"> <li>Mobile Remote Device Management</li> <li>Terminal Emulation</li> <li>Transcriber</li> <li>Screen Capture</li> </ul>
<b>WARRANTY</b>	<ul style="list-style-type: none"> <li>1 Year Warranty (extended warranties available)</li> </ul>
<b>BAR CODE SYMBOLOGY</b>	<ul style="list-style-type: none"> <li>Code 128</li> <li>Code 39</li> <li>Code 2 of 5</li> <li>EAN-13</li> <li>PDF417 (2D Code)</li> <li>UPC (call for complete list)</li> </ul>
<b>TRUE-CAMERA-SYSTEM</b>	<ul style="list-style-type: none"> <li>5.17 megapixel color CMOS Sensor - 4 megapixel processed</li> <li>Auto Focus, Shutter, Aperture and Illumination</li> </ul>
<b>MULTIMEDIA</b>	<ul style="list-style-type: none"> <li>Integrated Speaker and Microphone</li> </ul>

## ~ DIMENSIONS

- Height:** 10.81 in. (274.5 mm)
- Width:** (Display area) 5.31 in. (134 mm)
- Width:** (Keypad area): 3.06- 4.68 in. (78-119 mm)
- Depth:** (Widest point) 2.25 in. (57 mm)
- Display Size** (Active area): 2.8125 in. x 2.125 in. (71.43 -53.9 mm)

## ~ WEIGHT

- With 2 Rechargeable Batteries installed:** 39.04 oz (1106 g)
- Without Batteries:** 31.36 oz (889 g)



**Imager is located on the back of the unit for easy and efficient image capture.**