

# HYDRUS<sup>®</sup> Luna

WHEN FIELD TIME TURNS INTO OVERTIME...HYDRUS.



## ~ 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
- Integrated Xenon True-Flash-System for low light conditions
- Optional Integrated Precision GPS (HYDRUS Luna GPS)
- 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

The New Hydrus<sup>®</sup> Luna features the same outstanding battery life, rugged exterior, and integrated imager as the original Hydrus. So what's different about Hydrus Luna? Lights. Camera. Action!

Poorly lit offices, dark warehouses and overcast skies can make it difficult to capture a detailed image. The New Hydrus Luna features an integrated Xenon True-Flash-System that brings subjects to life in demanding photographic applications.

Whether you are in a dark utility closet, or in a parking garage at sunset, you will always have the right amount of illumination on your subject. The powerful flash is software controllable which allows you to adjust the intensity for near or far images.

Combine all of this serious computing power, incredible battery life, and an IP67/68 rating, with Precision GPS, and **Hydrus Luna GPS** is ready to light the way, no matter where you roam.



## SHEDDING THE PERFECT LIGHT ON DATA COLLECTION...

### Imager and Xenon True-Flash-System ~

Capture images and barcodes in dark or low light environments with an integrated 5MP imager and a powerful, software controllable Xenon photo flash. Dispersed Optical Flash Lens allows for optimal light pattern over image subject area.

### Dual Smart Battery System

**36 WATT-hours** ~ Dual 2500 mAh batteries (5000 mAh total) offer the longest battery life in the industry. Both batteries have a charging circuit and "gas gauge" to monitor battery condition during charging and discharging.

**Ergonomic Case** ~ Designed for easy data entry via keypad or touch screen, Hydrus Luna 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.

### LED Indicators ~

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

### Joystick Key and Individual

**Hard Keys** ~ Patent pending design minimizes accidental presses around the joystick, allowing for precise directional control. Keypad is uniquely designed with shear-proof hard keys for easy operation with gloved hands.

**GSA Advantage!**<sup>®</sup>  
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<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> </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>OPTIONAL INTEGRATED PRECISION GPS</b>	<ul style="list-style-type: none"> <li>• Optional Integrated uBLOX GPS with SuperSense and KickStart</li> <li>• super low SNR performance</li> <li>• Active Patch Antenna technology</li> <li>• Data Protocols Supported: NMEA 0183 and UBX</li> <li>• 50-channel uBLOX 5 engine for great accuracy and</li> <li>• Engine Supports SBAS (WAAS, EGNOS, MSAS, GAGAN)</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 *actual time may vary based on a variety of conditions</li> </ul>
<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</li> <li>• "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>• Glove and weather friendly ergonomics</li> <li>• Shear-proof hard keys</li> <li>• "Real-Feel" keyboard technology</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® 2008 (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(add-on)</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</li> <li>• DATAMATRIX (contact Two Technologies for complete list)</li> </ul>
<b>TRUE-CAMERA-SYSTEM</b>	<ul style="list-style-type: none"> <li>• 5.17 MP color CMOS Sensor - 4 megapixel processed</li> <li>• Xenon True-Flash-System</li> </ul>
<b>MULTIMEDIA</b>	<ul style="list-style-type: none"> <li>• Integrated Speaker and Microphone</li> </ul>

## HYDRUS<sup>®</sup> luna<sup>GPS</sup>

**Optional Integrated Precision GPS** ~ With optimum antenna position for sky visibility and user operation, the Hydrus Luna GPS features cutting-edge Horizontal Positioning accuracy, 2.5m CEP, and Fastest Time-To-First-Fix in the market with the highest sensitivity for hot and aided starts.

## HYDRUS<sup>®</sup> RFID

With the Hydrus PACK, the Hydrus and Hydrus Luna can read tag IDs, read and write data blocks, as well as authenticate and encrypt data to and from compatible tags. These capabilities allow solutions to support secure storage of information on tags for the privacy and security required in a number of markets including, Access Control, Agriculture, Libraries, Manufacturing, Mobile Commerce, Security, and Warehousing.

- Software Based 13.56MHz RFID Reader/Writer
- IP67/68 Rated: Immersion Protection
- Full 2T RFID API
- To ensure compatibility, call to discuss application and tag type



### ~ DIMENSIONS with GPS

- **Height:** 12.5 in. (317mm)
- **Width (Display area):** 5.31 in. (134mm)
- **Width (Keypad area):** 3.06-4.68 in. (78-119 mm)
- **Depth (Widest point)** 1.875-2.3125 in. (48-59 mm)
- **Display Size (Active area):** 2.31 in. (58.6 mm)

### ~ WEIGHT with GPS

- **With 2 Rechargeable Batteries installed:** 42.24 oz (1197.48 g)
- **Without Batteries:** 34.88 oz (988.83g)

### ~ WEIGHT w/o GPS

- **With 2 Rechargeable Batteries installed:** 40 oz (1134 g)
- **Without Batteries:** 32.32 oz (916.2 g)

Visit our website for additional dimensions and weights.

Supports most major tags, such as:

- ISO 15693
- ISO 14443A
- ISO 14443B
- MIFARE
- I-CODE®
- my-d®
- Tag-it™