




Rugged Ultra Mobile PC Units

COMPARISON CHART

				
	Panasonic Toughbook U1	General Dynamics Itronix GoBook MR-1	Roper Mobile SwitchBack	Comments

RUGGEDNESS FEATURES

Magnesium Alloy Design	•	•	•	
Solid State Drive	•	Option	Option	Reduces likelihood of damage to a hard drive resulting from a drop or shock to the laptop
Removable Drive	•	•	•	
LCD Mounting Protection	•	•	•	
Fanless Design	•		•	Fanless design keeps out water and dust, reducing weight and points of failure
Sealed All-weather Design	•	•	•	
Spill-resistant Keyboard	•	•	•	
Drop Test	4 feet (MIL-STD-810F)	3 feet (MIL-STD-810F)	3 feet (MIL-STD-810F) 4' with optional SSD	The U1 has a 33% higher drop height with the standard hard drive
Ingress Protection Rating	54	54	67 (65 with attachments)	Indicates how well sealed a product is against intrusion from dust and water
UL1604 Class I Division 2 certified Model	•			UL1604 Class I Division 2 certification is required in hazardous areas to prevent potential sparks
Sunlight-viewable Display	•	•	•	
Anti-glare Screen Treatment	•			Anti-glare treatment improves viewability indoors by reducing glare caused by fluorescent lighting
Anti-reflective Screen Treatment	•	•		Anti-reflective treatment improves viewability outdoors by reducing the appearance of reflections
Screen Protection Film	•			Protectant film reduces the expense and downtime of having to replace worn LCDs
Carrying Strap	•			Strap makes UMPC easier to handle, making it less likely to be dropped
Integrated Hidden (3G) Antenna	•			An integrated antenna reduces likelihood of accidental breakage when a unit is dropped or hits another object
Integrated Mobile Broadband (3G) Option	•	•		Mobile broadband allows access anywhere there is cell phone coverage, allowing true mobility
Integrated Wi-Fi	A/B/G/Draft-N	A/B/G	B/G	
Bluetooth® 2.0 (Class 1 approx. 300' range, Class 2 approx. 33' range)	• (Class 1)	Option (Class 2)	Option (Class 2)	Class 1 has approximately 9x the range allowing greater mobility; 2.0 is 3x faster, uses less energy and is backwards compatible
Backlit Keyboard	•	•	•	
Warranty	3 years	3 years	1 year	Panasonic offers 3x the warranty period compared to the SwitchBack


KEY FEATURES

Screen Size	5.6"	5.6"	5.6"	
Screen Resolution	WSVGA 1024 x 600	WSVGA 1024 x 600	WSVGA 1024 x 600	
Touchscreen	•	Option	•	Touchscreens allow easy data entry and interaction, providing an intuitive interface
Full QWERTY Keyboard	•	•		The QWERTY keyboard allows for faster typing by providing a similar input to traditional PC keyboards
Number of Keys/Buttons (not including power or scanner buttons)	69	76	33	
Dedicated Programmable Buttons	4	2		Panasonic has more dedicated programmable buttons, allowing for increased speed and efficiency



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KEY FEATURES (CONT.)				
Directional Buttons	•	•	•	
Zoom Buttons	•	•		The U1 has dedicated zoom in and out buttons, allowing for easy viewing
Scroll Buttons	•			The U1 has dedicated scroll buttons, allowing for easy navigation
Weight (without options or attachments)	2.3 lbs	2.0 lbs	3.0 lbs	The SwitchBack without any attachments is 25% heavier with only half the battery life. The U1 without a strap and 1 battery is 1.9lbs. and has 50% more battery life
Dimensions (L x W x H) (without attachments)	5.9" x 7.2" x 2.2"	4.8" x 6.6" x 1.6"	5.5" x 7.5" x 2.0"	
Battery Life (with standard batteries)	9 hours	3 hours	4 hours	Panasonic has more than double the battery life
Maximum Battery Swap Time	240 minutes		2 minutes	The U1 can support hours of continued uninterrupted operation versus just minutes—ideal for when there are no outlets or charged batteries available
Twin Batteries	•			Interchangeable twin battery design can give users much more time to change batteries without losing data
Windows® XP SP2 Professional	•	•	•	
Windows Vista® Business	•		Option	The U1 is the only handheld Vista® Business which is better suited for enterprise environments than Vista® Home
Processor	Intel Atom Z520	Intel Solo U1400	Intel Celeron M 423	The U1 utilizes the latest generation of silicon from Intel, the world's leading manufacturer of CPU processors
Processor Clock Speed	1.33 GHz	1.2 GHz	1.0 GHz	
L2 Cache	512 KB	2 MB	1 MB	
Front Side Bus (FSB)	533 MHz	533 MHz	533 MHz	
Standard Hard Drive	16GB SSD	40GB PATA HD (shock-mounted)	40GB SATA HD (shock-mounted)	SSD offers better protection, uses less power, weighs less, makes no noise and has faster start-up/access time
Standard RAM	1 GB	512 MB	512 MB	The U1 has 2x the standard RAM providing more storage and also improving the access speed (versus using a hard drive or SD card)
USB / SD / CF Mic or Mic Port / Headphone / Expansion	1 / 1 / 0 1 / 1 / 1	1 / 0 / 0 0 / 1 / 1	1 / 0 / 0 0 / 0 / 1	Only Panasonic provides an SD slot on the unit, which is useful for transferring data or adding more storage capacity
Integrated 1D Barcode Option	•		Requires Attachment	The 1D barcode is built into the U1, which increases durability and ease of use versus requiring an attachment
Integrated 2D Barcode Option	•		Requires Attachment	The 2D barcode is built into the U1, which increases durability and ease of use versus requiring an attachment
Integrated RFID Option	Project Driven		Requires Attachment	
Integrated Camera and LED Light Option	2MP and light		3MP no Light (Requires Attachment)	The camera is built into the U1, which increases durability and ease of use versus requiring an attachment
Integrated Fingerprint Scanner Option	•	•	Requires Attachment	The fingerprint scanner is built into the U1, which increases durability and ease of use versus requiring an attachment
Integrated GPS Receiver Option	•	•	Requires Attachment	The GPS receiver is built into the U1, which increases durability and ease of use versus requiring an attachment
Integrated SmartCard Reader Option	•	•		A SmartCard Reader increases the security of the device