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# newsmaker



*“mophie has pioneered the peripheral power/intelligent case market segment for smart-phones, making the devices more useful and increasing their functionality.” - Jeff Bocan, Managing Director, Beringea*



# The Daily Telegraph

## **iPhone credit card reader to launch at CES**

An iPhone accessory that makes it possible to take credit card payments using the handset will be launched at CES in Las Vegas later this week.

January 4, 2010

The card reader, made by iPhone accessory company Mophie, plugs into the phone and lets users swipe credit cards. The card details are then processed by an iPhone app that handles the payments.

Mophie, a US-based company, makes iPhone cases and batteries. Their 'juice pack' accessory doubles the iPhone's battery life. However, the card reader will be the first peripheral they have designed to work with an app.

Late last year, Jack Dorsey, the founder of Twitter, announced Square, his own iPhone credit card payment system. Square, which launches early this year, is a small cube which plugs into the phone and allows cards to be swiped. Square also emails receipts, allows retailers to see a photo of the customer and provides a reward system.

Card payment accessories are the latest in a range of peripherals made available for the iPhone since the latest version of the phone's software was released last year. The software update made it possible for applications to work with peripherals, bringing the possibility, for example, of medical peripherals for the handset.

## Device makers bring mobile TV to iPhones

Qualcomm's FLO TV joined Valups in introducing an accessory for picking up digital broadcasts

By Stephen Lawson

January 7, 2010

Two partnerships backing different forms of mobile TV are using this year's International Consumer Electronics Show to announce devices that can bring TV to iPhones through the back door.

There's no built-in hardware for watching live TV broadcasts on the iPhone, but both Qualcomm's FLO TV subsidiary and a group of mobile TV broadcasters are working with hardware manufacturers to create accessories they say can deliver a full mobile TV experience on the popular handset.

On Monday, South Korean vendor Valups announced the Tivit [4], a device developed with support from the Open Mobile Video Coalition (OMVC), which can pick up Mobile DTV broadcasts over the air and pass them on to various devices via Wi-Fi. On Wednesday, FLO TV followed with an announcement in conjunction with Mophie, a maker of accessory sleeves for the iPhone. They are readying a series of products that add a FLO TV receiver and antenna to Mophie's Juice Pack line of sleeves for iPhones and iPod Touch units, which include extended batteries.

Both products are set to go on sale in the first half of this year. The Tivit should cost between US\$90 and \$120, and will work with 3G iPhone models, newer iPod Touch models, BlackBerries, Motorola Android phones, and other Wi-Fi devices, according to Valups.

FLO TV and Mophie did not disclose pricing. Mophie's Web site includes some information [5] on the Juice Pack TV for the iPhone 3GS.

TV content has been offered on phones in the U.S. for several years, but much of it has been delivered over cellular networks instead of true broadcasting. Picking up broadcast TV requires special hardware, and mobile TV competes against many other mobile applications and forms of entertainment, such as games and online videos. Analysts question whether it will become the blockbuster hit some are hoping for.

FLO TV provides a mobile TV service, offered by both Verizon Wireless and AT&T, that can deliver as many as 20 channels of live and pre-recorded TV programming. The company, founded by Qualcomm in 2004, owns its own licenses for former analog TV channels and operates transmitters in many large and medium-sized metropolitan areas around the U.S. Its programming is focused on national networks such as ESPN Mobile TV, Fox Mobile and NBC 2go, and the service costs about \$9 to \$15 per month. The content is available on the FLO TV Personal Television, which is a dedicated handheld TV, as well as on selected phones from mobile operators.

Mobile DTV is a specification approved last October by the broadcasting standards body Advanced Television Systems Committee (ATSC). The standard is designed for local broadcasts on a portion of the spectrum allocated for regular digital TV. It's intended for both free simulcasts of a station's regular programming and, eventually, subscription-based content. The OMVC is made up of 29 U.S. broadcasters that use or plan to use Mobile DTV.

FLO and Mophie didn't provide many details about their planned products. Users will be able to switch their iPhones or iPods between charging, standby and live TV settings, and the Juice Pack's battery will provide an extra four hours of viewing time, according to Mophie. The kit will include a stand for table-top TV viewing.

While FLO TV's rollout is being driven by a revenue-generating service provider backed by a major wireless technology company, ATSC's Mobile DTV is being deployed one broadcaster or station at a time. There are only 30 stations around the country set up for mobile DTV now, though the group expects hundreds by year's end. It costs less than \$150,000 and takes less than two hours for a single station to set up the technology, according to David Arland, a spokesman for the OMVC and Valups. The OMVC says its members represent about 800 stations nationwide.

Before full commercial broadcasting on Mobile DTV begins, there will be a trial run in the Washington, D.C., area in the first quarter of this year, the OMVC announced this week. Eight local stations there will show as many as 20 channels of free and premium programming to a variety of mobile devices that consumers will try out. Those devices include the Dell Inspiron Mini 10 netbook, the Samsung Moment phone, the Tivit and an LG Electronics portable DVD player with built-in TV.

Though video on phones seems to have a bright future, mobile broadcast TV faces a variety of hurdles, according to industry analysts.

"I'm bullish on mobile video," said Phil Marshall of Yankee Group. Because the phone is a personal device, it's a good platform for viewing Web video and video on demand, he said. Once consumers start using high-definition wireless video streaming, they will store shows on the phone for replay on TVs and PCs, Marshall believes.

But mobile broadcast TV falls short in terms of the variety of content it offers and how much consumers can personalize the experience, he said.

"You're merely replicating a TV experience on a mobile device," Marshall said.

Mobile TV providers also will need to generate more consumer awareness and enthusiasm for the technology in order to drive further adoption by broadcasters and device makers, according to analyst Avi Greengart of Current Analysis. The accessory approach these partnerships are announcing at CES also faces a challenge, because TV capability built in to a mobile phone is more appealing to most U.S. consumers, Greengart said.

CES begins on Thursday, Jan. 7.



## A Closer Look at Haiti Quake Survivor's Use of Tech

By Brian X. Chen

January 26, 2010

Dan Woolley was all over the news last week as the tech geek who survived the Haiti earthquake with the help of a first-aid iPhone app, his digital SLR and, of course, a lot of luck.

The religious man credits his survival to God and all those praying for him. But in an interview with Wired.com, he reveals that he was even more technologically resourceful than initial reports suggested.

After the quake struck, burying the Hotel Montana in rubble, Woolley, a web programmer, came up with some clever techy ideas. In addition to consulting the iPhone app First Aid & CPR for advice on treating cuts, Woolley used his digital SLR's focusing light to help illuminate his surroundings. He snapped photos of the wreckage, using the flash to help him search for refuge. His viewfinder revealed a crumbled elevator shaft, where he prayed, rested and bandaged his wounds. Then, Woolley set his alarm to go off every 20 minutes to stay awake, fearing that if he fell asleep, he could go into shock. A French rescue team dug him out of the shaft 65 hours later.

Help Haiti Recover

That was the gist of the story broadcast news outlets reported last week on Woolley, but there's more.

While waiting for rescue, Woolley recorded voice memos for his family with his iPhone. And when he was feeling discouraged, he used the iPod app to listen to music.

How did his iPhone battery last an amazing 65 hours? Woolley had a Mophie "Juice Pack" battery extender that he plugged into his iPhone, giving it several hours more juice. He also stopped using the alarm after feeling reassured that he wouldn't go into shock.

When the battery meter sank to 20 percent, Woolley shut off the iPhone to save the power. Before he did, he had stored some text messages calling for help, figuring he would have them ready to send in case he could get a miraculous cell connection.

"It really was an incredible tool in my pocket, and I was really glad to have it," Woolley told Wired.com on the phone.

dan woolley

Woolley clarified that he was using the app not to learn to treat his cuts, but rather to ensure he was doing it properly.

"I don't know if I would've necessarily done things differently if I didn't have [the iPhone app]," Woolley admitted. "At a point of great inner turmoil it was great to have something that was definitive. It's not like I read it and I learned and said, oh really I should tie the wound? It's more like OK, this is what I do. All right, I'm doing the right thing."

Woolley added that many on the web criticized him for not having a first-aid kit with him. He said critics were missing a major point about the importance of the iPhone, and other similar app-powered smartphones, such as Google's Nexus One, being a general-purpose tool that you carry with you everywhere.

"For people who pointed out I should've had a pocket first aid kit, the reason they're wrong is I wouldn't have it in my

pocket,” he said. “How many people have gone out of their way to add one more thing to their pocket? What was valuable about the iPhone is it was already in my pocket. And I thought, it would probably be a good way to have some first aid tips in here, so I downloaded that app. That’s the value of this utility.”

Woolley was one of reportedly 23 survivors rescued from the rubble that buried Hotel Montana in Port-au-Prince, Haiti after the massive earthquake. He was shooting a video about poverty-stricken children in Haiti with his friend David Hames, a filmmaker, when the quake struck. Hames was not found.

“My iPhone did not save me, God and the prayers of tens of thousands of His people did,” Woolley said.

## Let Your Customers Pay By Credit Card Using Your iPhone

*With Square and Mophie Marketplace about to join the already launched PAYware Mobile, business owners will soon have an array of mobile credit card processing options to consider.*

By Shannon Suetos

March 11, 2010

The concept of Square is simple: stick a card-reader dongle into the audio input jack of your iPhone or iPod Touch and start swiping credit cards. For small businesses, particularly retailers that aren't always in a fixed location with access to a phone line for a card processing terminal, Square could be a godsend. Some industry watchers have gone so far as to predict that Square portends the end of cash.

Whether Square is a helpful transaction tool, harbinger of an economic sea change, or an overhyped flash in the pan remains to be seen - the service launches in April. For small business owners, the question is whether or not Square is a solution you should consider for your business when it becomes available next month. While you wait for the arrival of Twitter co-founder Tom Dorsey and glass artist Jim McKelvey's brainchild, here are some factors to consider about Square.

### Merchant Account Fees:

On average, credit card processing companies charge transaction fees of 1.5-2% -- Square charges 3-3.5%. That higher percentage may be deal-breaker for some businesses, but it really depends on the volume of credit card transactions. If your business only processes credit cards occasionally, other merchant providers' fees may be just as high. For low-volume users, the convenience of the Square appliance may well trump the cost, but higher volume businesses will want to look for other solutions and even negotiate for lower merchant fees.

### Credit Card Terminal:

If you already own an iPhone or iPod touch, you'll need a card swiping dongle and an app to start using Square. The app is predicted to cost \$1.99 at the iTunes store and Square says they'll provide the card swiper dongle free. Support for BlackBerry and Android phones is allegedly on the way as well. By contrast, hardware for traditional credit card terminals can range from \$150-700 for the most basic terminal up to \$1000 for wireless terminals. Leasing the equipment can take lessen the sting some with costs running around \$20 a month. Moreover, most merchant card processors require a contract commitment, whereas Square is purely pay as you go - hence the higher per transaction fees.

### Features:

When it comes to fees and card terminals, evaluating Square is purely a mathematical exercise, but the comparison shifts when it comes to feature set. The expected features for Square includes a number of options that traditional merchant accounts just don't offer, including text and email receipts and photo ID capabilities.

### Other Mobile Options:

Though Square is a media darling of this moment, it's not the only mobile credit card processing option. Another alternative due out in April is Mophie Marketplace, an magnetic card reader that's built into a case for the iPhone 3G and 3GS. Pricing hasn't been announced yet, but is reported to be compatible with most merchant accounts and will allow syncing of account information, as well as charging the iPhone, via micro USB port.

Another option that combines an iPhone case with a card reader is the PAYware Mobile secure credit card encryption sleeve from VeriFone. Unlike the other two discussed here, PAYware Mobile is available right now; it launched in February. To start swiping credit cards you'll need the free iPhone app from the iTunes store and the PAYware card encryption sleeve, which

includes a stylus for signature capture and is free with a two-year contract. Only available for the iPhone now, Verifone claims to be working on versions for BlackBerry, Windows Mobile, and Android.

Regardless of the solution you select for your business, it pays to review the host of available and soon-to-be available options to selection the solution that best suits your needs.



## Mophie Brings Juice Pack Air Case/Charger To iPod Touch

By Ray Willington

April 10, 2010

We don't exactly get along with batteries very often here at HotHardware. Most of 'em tend to underwhelm us, and the one's that impress us (Apple's iPad rings a bell) are few and far between. Mophie loves the fact that most handheld devices have paltry battery life results, because that very problem encourages consumers to seek out solutions for extending the life of their favorite gadgets.

The company has become somewhat of an icon in the iPhone charging space, with their Juice Pack Air amongst the most highly regarded in the industry. For those who somehow don't have a problem with the battery life of their iPhone (or who just don't own one at all), the Juice Pack Air is a slide-on case that serves two purposes: it keeps the phone safe from bumps and drops, and it provides an additional battery that can be switched on at any time. When used, it can provide multiple hours of additional talk time, and while the extra bulge is noticeable, it's not terribly awful given the benefit of extra life.

Today, Mophie is launching into another market with the sixth-generation Juice Pack Air. This one, however, is made for Apple's iPod touch, which just so happens to own a lion's share of the mobile media player market. The device will fit onto the rear of the iPod touch in the same manner as described above for the iPhone, and it will provide 7 extra hours of battery life. It will ship in red, blue or black colors, and it will also act as a protective case and include a pass-through USB cable that enables users to simultaneously charge and sync an iPod touch to iTunes without having to remove it from the Juice Pack Air.

It's available now for the latest generation of iPod touch handhelds for \$79.95.

Key features and benefits include:

**Battery Extender and Case in One** – the juice pack offers the convenience of an extended battery life and the protection of a case, all with an ergonomically designed, soft-touch, non-slip rubberized finish.

**Pass-through USB** – Included USB cable enables you to simultaneously charge and sync your iPod touch to iTunes without having to remove it from the juice pack air.

**Advanced Battery Technology** – Intelligent power distribution instructs the iPod touch to always drain out the juice pack first. When you're done with the juice pack air for iPod touch, simply detach the case and you will still have a fully charged iPod touch. Highly condensed lithium polymer battery delivers an incredible amount of juice in a small form factor and features built in overcharge, short circuit and temperature protection.

**Four Light LED Battery Status Indicator** – An integrated LED status indicator tells you exactly how much “juice” is left and also displays how much time remains during the charging process.

**Twice the Power** – a full charged juice pack air gives users:

Up to additional 30 hours of Audio Playback

Up to additional 7 hours Video Playback

## Review: Mophie Juice Pack Air - the iPhone back-up battery

By Carly Wilkie Steven

August 12, 2010

I love my iPhone but let's face it, the battery life is abysmal.

Every day I have to plug it into my PC at work to top up the charge and if I'm out in the evening it has inevitably run down to 10 or 20 per cent by the time I get home.

So when I was offered the chance to test drive an external battery pack I thought I'd found the solution to my problem.

Mophie Juice Pack Air claims to boost the battery power of your iPhone

Mophie Juice Pack Air claims to boost the battery power of your iPhone

Not only did the Mophie Juice Pack Air promise to nearly double the battery life of my iPhone 3G, it also acts as a hard-shell protective case.

So it was with great enthusiasm that I unpacked my little black box and slotted the phone into place.

The accompanying instruction leaflet claimed that the Juice Pack would arrive fully charged and ready to go.

But when I flicked the power switch on the back of the case instead of the promised green twinkly LED lights I got ...nothing.

The Juice Pack comes with a USB micro cable and takes two to three hours to reach maximum power.

You can track the status of the battery charge by the 4 light system which indicates both the charging mode (ie whether the Juice Pack is charging you phone or in standby mode) and the remaining battery life.

The standby mode option is probably the device's best feature as it allows you to decide when you want to charge the battery and when you simply want to use it as a protective case.

Using the USB cable you can also sync your iPhone while simultaneously charging the Juice Pack.

Overall it's a slick gadget but I was a bit disappointed by the amount of charge it delivered; there was a bit of an extra kick but not quite the two days I had been anticipating.



## Mophie and Intuit Launch Credit Card Processing Solution for iPhone

By Stan Schroeder

August 26, 2010

Small business owners who are looking for a cheap, simple solution for credit card processing, take notice: Mophie and Intuit have launched an all-in-one package that lets you accept payments and process credit cards on your iPhone 3G or 3GS.

Named the Complete Credit Card Solution, it consists of Mophie's iPhone case with a credit card reader at the bottom, and Intuit's GoPayment app, which takes care of the software side. It also integrates with Intuit's QuickBooks software, which lets you track invoices and payments.



It works as follows: You, a small business owner, apply for a Intuit Merchant Account that will let you process credit cards in a matter of minutes. The customers swipe the card through the reader attached to your iPhone, and sign their names on the iPhone touch screen. Finally, you send the customer an e-mail or text receipt. Intuit claims that its software processes the credit card "within seconds," after which the funds are deposited into the business's bank account.

The price of the Complete Credit Card Solution is \$179.95 at Apple Retail Stores and soon, claim Intuit and Mophie, on Apple.com. GoPayment, which includes the Intuit merchant account, costs \$12.95 per month, with a 1.7 to 3.7% discount rate and \$0.30 to \$0.34 per transaction fee. One account can enable up to 50 users. Finally, there are no long-term contracts, cancellation, gateway or setup fees.

With this product, Mophie and Intuit took some of the flare out of Jack Dorsey's credit card processing solution, Square, especially because Intuit already has an established user base. However, Square still offers a number of advantages over Mophie and Intuit's solution: a free card reader, no monthly fee, lower transaction fees, and it's compatible with both iOS and Android devices.

## **Processing Credit Card Sales with an iPhone**

By Ian Mansfield

August 30, 2010

Financial management company, Intuit and iPhone accessories seller, mophie have announced the availability of Credit Card application that enables small businesses to process credit card payments via the Apple iPhone.

Intuit GoPayment offers an application process that is designed to let merchants start processing credit cards on their iPhones in as few as 15 minutes. GoPayment is also compatible with QuickBooks Mac to save time in keeping business financial files up to date.

Customers authorize the payment by signing their name on the iPhone touch screen. The merchant can then send them an e-mail or text receipt. GoPayment processes the credit card within seconds and funds are deposited into the businesses' bank account.

Shawn Dougherty, COO of Mophie, said: "Mophie designs products that enable consumers to do more with their Apple devices and that deliver additional convenience and freedom for all types of mobile activity. This integrated hardware and software mobile payment solution enables immediate and secure financial transactions on the go for a vast audience of small business owners and their employees."

## Tech company, founded in Southwest Michigan, growing by triple digits on success of Apple iPhone

By Alex Nixon

September 2, 2010



PAW PAW — The growing popularity of Apple Inc.'s iPhone has meant big business for a California tech company with Kalamazoo-area roots.

The company, mophie, launched its business in 2005 in Oshtemo Township under the name mStation Audio LLC, first selling audio docking systems for Apple's iPod music player.

"Michigan is cheap and easy to start a company," said Ross Howe, the company's vice president of marketing and new business development.

Howe said mStation Audio was founded by Daniel Huang, now the company's CEO, and Shawn Dougherty, who serves as chief operations

officer. Huang, Dougherty and Howe are originally from Southwest Michigan.

The company acquired mophie in 2006, took its name and made the transition to designing and manufacturing cases and accessories for the iPhone, which launched in 2007.

Since then the company has taken off, growing its sales by triple-digit percentages in recent years.

In 2009, sales increased by more than 600 percent, compared to 2008, Howe said. This year, the company is projecting a sales increase of more than 200 percent.

The privately held company doesn't release revenue figures, but Howe said mophie has sold more than 1 million Juice Packs, an auxiliary battery that attaches to the iPhone and retails for about \$80.

In October 2009, mophie moved its sales, marketing and administration to Santa Anna, Calif., south of Los Angeles, and about 380 miles south of Apple's headquarters in the San Jose area.

"We're basically in San Jose visiting Apple once a week, so it makes more sense to have marketing and sales in California," Howe said.

But it's kept other company operations — distribution, quality control, tech support and customer service — in Paw Paw, where it employs 30 people, he said.

"We're committed to staying in Michigan," he said.



As Apple grows, mophie grows.

In July, Apple reported its fiscal third quarter results, stating that iPhone sales had increased by 61 percent compared to a year ago to 8.4 million units. And the number of iPhone owners has been forecast to reach 100 million by the end of 2011, up from 30 million at the end of 2009.

And as mophie grows, so does its Paw Paw operation, Howe said.

“We’re adding product lines every quarter and with that we have to expand operations for quality control, customer service ... tech support,” he said. “Our square footage (in Paw Paw) has been expanding year over year every quarter.”



The company also recently launched a new product that allows retailers or others to perform credit card transactions with an iPhone. Partnering with Intuit Inc., the maker of Quickbooks accounting software, mophie last month launched the Complete Credit Card Solution, which is being sold in Apple stores.

“It’s a case for the iPhone that’s also a credit card reader,” Howe said. “There’s been a lot of interest in mobile payments. I think this is the best execution so far.”

While mophie uses contract manufacturers in Asian to make its various products, Howe said the company will continue to expand its presence in Michigan. The Kalamazoo area is a good place to run a distribution center because of its central Midwest location.

Michigan’s economic problems are a “double-edge sword” for the state, Howe said, because inexpensive, available labor and property make it attractive to companies looking to set up shop.

“It’s cheap and easy because Michigan is going through a tough time,” he said. “When you have a successful product internationally you can leverage Michigan.”



## **Beringea Backs Mophie to Help Make Smartphones Smarter in an Exploding Market**

By Ryan McBride

September 9, 2010

In about four years, Mophie has evolved from a startup operated out of a founder's garage in Kalamazoo, MI, to a fast-growing provider of electronic accessories for smartphones and other mobile devices with operations in Paw Paw, MI, and Santa Ana, CA. That's according to Jeff Bocan, a managing director for the Farmington Hills, MI-based private equity and venture firm Beringea, which has become Mophie's first institutional investor.

Beringea, Michigan's largest venture firm, announced yesterday that it has made an investment in Santa Ana-based Mophie through the InvestMichigan Growth Capital Program to advance the company's marketing and product development. (InvestMichigan, a \$185 million fund managed by Beringea and a unit within Credit Suisse Group, was launched in 2008 to seek investment opportunities in Michigan). Bocan, who says he is becoming a board member at Mophie as part of the investment deal, filled us in on the story of the young company and its growth since its founding in 2006. He declined to reveal the exact amount invested in the company, but noted that it's within his firm's typical range of \$2 million to \$7 million.

Mophie started out in the home garage of company co-founder Shawn Dougherty in Kalamazoo, Bocan said. She and the company's co-founder and CEO, Daniel Huang, have quickly turned the company into a major supplier of portable cases for recharging mobile devices such as the iPod and iPhone as well as other electronic accessories. The firm has since outgrown its space in Dougherty's garage and moved its distribution center to Paw Paw, while its design and marketing operations are now located at its headquarters in Santa Ana. (Still, 30 of its roughly 45 workers are in Michigan.) Its sales have already exceeded \$20 million in 2010, continuing a trend of huge increases in annual revenue at the company, he said.

"What we are investing in is really a company that makes smartphones smarter, and more useful," Bocan said.

To make his point, Bocan noted Mophie's "credit card swiper" that fits onto the bottom of iPhones and enables people to process credit card payments from almost anywhere. A plumber could carry it with him to process credit card payments at a customer's house, he said. The accessory includes software that turns the iPhone's touch screen into a signature pad so customers can sign their names after they swipe their credit cards, to complete their transaction.

Mophie, which manufactures its products in Asia, developed its smartphone accessory for processing credit card payments in partnership with the Mountain View, CA-based financial software company Intuit (NASDAQ: INTU). And Mophie also has worked with Qualcomm, the San Diego-based wireless technology giant, to develop a sleek case that provides additional battery life to the iPhone while people are watching shows with Qualcomm's FLO TV service. Mophie is also working on new accessories for Droid and BlackBerry smartphones, according to Bocan.

"The mobile computing trend is one of the fastest growing segments of the consumer electronics industry—and it's just enormous," Bocan said. "So we're really excited."



## Mophie's Juice Pack Powerstation Offers Portable Power Solution for Apple Users

By Siyahi

September 16, 2010



Mophie has launched its first innovation for the iPad users – the juice pack powerstation. It is designed to deliver portable power solution for the on the go Apple device users. The quick charge external battery of the powerstation can boast up to 2.1 amps of charging output with a 3600 mAh capacity.

### Mophies Juice Pack Powerstation Offers Portable Power Solution for Apple Users

The design is really different from the conventional style, and as the device comes with less weight, it's comfortable to carry them when you are out of office or home.

A standard toggle switch attached with the device avoids the power drainage while not in use. It also has an advanced battery cell which can automatically switch between the desired mAh charges including 500mAh, 1A and 2.1A. It is compatible with the iPad or any other USB devices including the iPhones, iPods and smart phones.

It has a two-tone metallic and soft touch finish. Indicators are invisible when not in use and they can also work as super bright flash lights when used in the dark.

The gadget allows simultaneous charging option for iPhone or other smartphones when the powerstation itself is charging and using a 2.1amps power charger.

The powerstation is the first of the expected iPad accessories from Mophie and the device is available in the Apple stores at \$99.95. Customers can also order the products via the Apple or Mophie sites.

## Mophie Juice Pack Air vs. Mili PowerSpring 4 review

By Thomas Ricker

September 22, 2010



If you're an iPhone owner then you've certainly heard of the Mophie Juice Pack. It's emerged as the external battery pack of choice for any iPhone owner needing more untethered power than Apple can provide from its non-removable batteries. But what about all those feisty upstarts? Can they compete in terms of design, functionality, and price? Let's find out. We put two iPhone 4 external battery pack cases -- the Mophie Juice Pack Air and Mili PowerSpring 4 -- head to head to see how they perform. Both promise to double the iPhone 4's 1420mAh li-poly battery life without adding too much bulk. And surely the 1600mAh capacity Mili outlasts the 1500mAh Mophie, right? You'd be surprised.

Mophie Juice Pack Air vs. Mili PowerSpring 4 review

### Specs

Mili apparently jumps from the gate with big wins in terms of price and capacity. Amazon lists the PowerSpring 4 for \$68.97 with a 1600mAh lithium polymer battery. The Juice Pack Air for iPhone 4, on the other hand, lists for \$79.95 on Mophie's own store with a 1500mAh lithium polymer battery listed in the specs. Be careful about jumping to any conclusions based on this information alone -- the Mophie price will likely drop a few bucks when it becomes more widely available (it's not listed on Amazon yet) and rechargeable battery capacities can be reported using either minimum or typical values. Regardless, what really matters is performance, not bullet points. We'll get to that soon enough.

The PowerSpring 4 measures 124 x 65 x 18 mm making it a bit shorter but slightly wider and thicker than the 128.8 x 63.8 x 17.2 mm Juice Pack Air. In practice, however, the size difference isn't noticeable. Both the Mili and Mophie offer pass-thru charging and syncing for the iPhone without removing it from the case.

### Out of the box

Both Mophie and Mili gave reasonable consideration to the packaging of their products. That's a must for Apple fans notorious for their sense of style and is a critical step in securing a positive first emotional response. But we'd have to give the nod to Mili here. The packaging is more compact, economical, and consistent with Apple's own products.

More importantly, both batteries shipped about 75 percent full (showing 3 out of 4 LEDs) making them ready to use out of the box. A nice, but expected touch. The cases are also much lighter than expected. The Mophie weighs just 2.5 ounces. Mili doesn't list the weight of the PowerSpring 4 but it's roughly the same as the Mophie, maybe a tad heavier.

## Design

The Mophie Juice Pack Air is the hands-down winner when it comes to design. While both are inflicted with a painted metal-look band encircling the case to mimic the iPhone 4's antenna, the Mophie was clearly loved and cuddled as it progressed from art to part. For all we know, the Mili was raised by an inattentive wire-frame monkey in Harry Harlow's lab.



Our biggest gripe with the Mili has to be the backside hinge and latching mechanism that's supposed to snap onto the tiny ridge created at the intersection of the iPhone's antenna and glass display. Simply stated: it doesn't -- the top of the case constantly slips off (right-side picture above). In fact, as a case, the Mili's design won't protect the display since it sits flush with the case's sides. And even if the phone does survive the initial impact, without a proper fitting case it's quite possible that the two will separate if when dropped from a sufficient (table top?) height and/or velocity.

Meanwhile, Mophie opted for a two-piece design for its Juice Pack Air: the larger piece holding the battery and a small cap that slides over the top with cutouts for the iPhone 4's controls. Unlike the Mili, Mophie slathered its Juice Pack Air in a soft-touch finish resulting in a more grippable case with a premium look and feel. Having said that, we have noticed signs of wear to the soft-touch finish after just a few days of steady use. Fortunately, the sides of the Juice Pack Air extend just a bit above the iPhone 4's display to protect it from falls on level surfaces.

Unfortunately, the cutouts on the Mophie's cap for the power, mute, and volume buttons inhibit casual, one-handed access to the iPhone 4's few buttons. The volume and mute, in particular, were only accessible when deliberately holding the case for two-handed fingering. The Mili, with its more aggressive cutouts didn't have this problem. While the Mophie's cap can be removed without affecting charging, that flexibility comes at the expense of protection.



Both the Mophie and Mili cases worked fine when attaching the bundled Apple headphone cable. However, neither of the cases' cutouts were large enough to accept the headphone cable from a pair of Skullcandy cans (Mophie on left, Mili on right above). Fortunately, they could still be attached by removing the Mophie's cap or by bending back the top of the Mili case (which then blocked the camera a bit) -- workarounds that minimize the cases' ability to protect their occupant.

Mophie's attention to detail really paid off with a very minor adjustment made at the bottom of the Juice Pack Air's case that forces the sound out the front (read: display side) of the iPhone instead of the bottom. Thanks to Mophie, you'll never again have to cup your hand at the bottom of the phone in a desperate bid to increase the speaker volume. We also liked that the Mophie case uses an exposed micro-USB jack (with matching black cable in the box) instead of the Mili's mini USB jack (with non-matching white cable) capped with a flimsy rubber cover.

## Performance

As a baseline, we usually get between eighteen and twenty hours of battery life from our iPhone 4. We're that annoying heavy user at the dinner table constantly checking updates be it browsing the web, checking email, streaming video, listening to music / podcasts, Twitter, Facebook... you know, the usual, over WiFi and 3G.

So, let's get it, the fact that these can be used as oversized cases is of secondary consideration. Can the Mili and Mophie really double the life of the iPhone 4's internal battery? To put it simply: almost. Was there a winner? No, not in terms of raw battery performance.

Both battery packs performed roughly the same under real world use, though the Mophie did so with more grace and elegance thanks to a red/green standby/charging switch and brilliant string of 4 white LEDs used to indicate the juice left in the battery. The Mili also had a standby

mode which essentially meant not hitting the power button after inserting the iPhone. Once charging, the only way to disable the Mili's battery was to remove the iPhone then reinsert it. The Mili's quartet of blue battery-level LEDs come tucked inside a clear plastic tube worthy of decorating an Appalachian shack at Christmas.



There are essentially two ways to use these battery packs. The first involves using the pack as an external battery (inserting a fully charged iPhone into a fully charged battery pack), the second as a charger for the iPhone (putting a depleted iPhone into a fully charged battery pack). Mophie recommends using the Juice Pack Air as a charger, not an external battery. That means putting the Juice Pack Air into standby mode (turning it into a passive case) and then flipping it into charge mode when the iPhone battery hits 20 percent. In practice, however, we didn't notice any significant advantage to this approach.

When used as an external battery (fully charged iPhone 4 inserted into a fully charged battery pack), the Mili gave us 16 hours and 30 minutes before giving up the ghost. Of course, the iPhone's battery was still fully charged. The Mophie lasted 16 hours before its battery was completely drained, leaving the iPhone to fend for itself. Keep in mind that this was real world use but still less than the 18 to 20 hours we typically get.

We then tested the packs as chargers with the iPhone 4 battery completely drained (not the 20 percent Mophie recommends). Using this approach, the iPhone battery charged 10 percent for every 16 to 17 minutes connected. After 2 hours, both the Mili and Mophie batteries were spent with the iPhone 4's battery registering a 69 percent and 73 percent charge, respectively. Again, not double the life.

Finally, we tested using Mophie's recommended threshold of 20 percent. Again, we saw the iPhone 4 charge at a rate of about 10 percent every 16 to 17 minutes on average finishing at exactly 90 percent for both cases. So yeah, no matter how we tested, we're still not seeing twice the battery life.

It's also worth pointing out that although the Mili is rated at 1600mAh, the 1500mAh Mophie exhibited equivalent performance characteristics. Remember what we said about minimum and typical battery capacity values at the top of this review? Mophie says that 1500mAh is its minimum capacity while Mili tells us that 1600mAh is the typical value. In other words, the batteries are likely twins.

## Conclusion

Neither the Mili PowerSpring 4 nor Mophie Juice Pack Air actually doubled our iPhone 4's battery life. However, they did extend life by more than 16 hours when used as external batteries. Otherwise, they were capable of charging the iPhone 4's discharged battery to 70 percent full when used as chargers. And with the batteries being equal, choosing the winner comes down to price and design. To us, the Mophie Juice Pack Air's superior build and flexible, two-piece design more than offsets the \$10 premium it currently demands.

## More Juice for Your iPhone

*The Juice Pack boost and reserve quickly recharges the iPhone and iPod*

By Keith Shaw

October 21, 2010

**The scoop:** Juice Pack boost and reserve, by Mophie, about \$40 (reserve) and \$60 (boost).

**What it is:** The latest battery packs from Mophie, the Juice Pack boost and reserve models are aimed at giving your iPhone or iPod some extra battery life, and will recharge those devices relatively quickly. The reserve features a 1000 mAh external battery, while the boost has a 1500 mAh external battery for recharging. The devices connect via the iPhone's Universal Connection Port, and also include an LED battery and carabiner clip for connecting to a laptop backpack.

**Why it's cool:** If you've owned an iPhone for any amount of time, you know that it's very hard to keep the phone charged for a complete day, especially if you end up in a dense 3G area (such as New York City), and are using the phone and data capabilities on a heavy basis. By 3 or 4 p.m., you're usually looking for a power outlet. The juice packs from Mophie allow you to connect quickly and get enough power that let you finish the day, or at least give you enough until you can recharge the iPhone through a power outlet or your computer's USB port.

**Some caveats:** If your iPhone is really drained, the juice pack will drain pretty quickly, leaving you with a dead battery pack (so if you have to recharge multiple times, you might need more than one). Also, there's no passthrough charging -- the ability to recharge the juice pack with the USB cable and the iPhone through the universal connecting port at the same time. If you're recharging the juice packs, you can't recharge the iPhone.

**Grade:** 4 stars (out of five)





## **Mophie Juice Back Boost Means No Excuses For Not Calling Mom**

By Kristen Ryan

October 22, 2010

OK. I know. It's not really a toy, but your teen's iPhone sure is! Teens love their iPhones and parents love being able to reach them, but the battery only lasts about a day. Has your teen ever forgotten to charge it overnight, then been unreachable all day?

The Mophie Juice Pack Boost (Compare Prices) emergency iPhone battery solves the problem. Charge up the little box at home via any USB device, then slip it into your kid's backpack. It holds the charge for years when it's not in use. When his phone is dead he can use the Juice Pack Boost to recharge it or make calls right away.

It also has a nifty little flashlight in it! Just remember to recharge the Juice Pack Boost to eliminate every excuse for not calling Mom.



## **Mophie Introduces Unfolding Workbook iPad Case**

By Joel Mathis

October 26, 2010

Mophie has expanded its line of Apple iOS accessories to include the Workbook, a lightweight case for the iPad.

The California-based company is already known for making cases and power packs for iPhones, iPods, and other mobile Apple devices. On Monday it announced the release of the faux-leather \$60 iPad case in five different color schemes: black with black strap, white with gray strap, orange with black strap, chocolate with cyan strap, and cement with yellow strap.

While normally the folio-style Workbook protects both the front and the back of the iPad-and can be secured with an elastic band-it can also unfold into a stand that displays the iPad at what Mophie describes as an "infinite" number of angles, depending on whether a user would rather type on the device or use the screen for surfing the Web or watching video. Its design also allows users to access all of the iPad's controls and ports, meaning you can charge and sync the device without removing it from the case.

The Workbook comes with a one-year warranty, and is available through [Mophie.com](http://Mophie.com) or [Amazon.com](http://Amazon.com).



## iPhone 4 charging case showdown: Mophie versus Dexim

By Jessica Dolcourt

November 10, 2010

Raise your hand if your iPhone 4 has ever flashed the 20-percent-left battery warning at a most inopportune time, with no usable or practical outlets in sight.

Yep, me, too. I've been the girl scanning cafe walls, poking at ambiguous hinged metal floor plates, and scouring airline gates in the hopes of finding a power source more times than I'd like to admit. If that's you, too, you should consider investing in a charging case that's equipped with its own battery pack.



Over the last few weeks, I slipped CNET's iPhone 4 into both the Mophie Juice Pack Air for iPhone 4 and the Dexim Supercharged Leather Power Case, competitors that each promises to resuscitate a flat-lining iPhone 4 at least one additional charge, and help protect it from dings and dents while it's at it. (Butterfingers over here appreciates that trait as well.)

### Mophie Juice Pack Air

Mophie Juice Pack Air (\$79.95) was first up on the chopping block. Like other Mophie Juice Back cases, it's got a sturdy two-part body made from matte plastic with soft-touch properties. The Juice Pack has grooved internal edges, so that the iPhone slides snugly into the bottom portion and over the charging pins. You then slide the upper portion over the top of the iPhone; both pieces dovetail together.

The Mophie case completely covers the iPhone, leaving holes for the camera, headset jack, volume controls, and so on. In addition, there's a Micro-USB charging port from which you can power up the Juice Pack on its own, or while it charges the iPhone. There's also a charging switch that powers the electric flow between the case and the iPhone. Best by far is the power indicator, a button that shows in LED lights how much power is left in the case. It works the same when you charge the case up.

Although it weighs only 2.3 ounces, the Mophie Juice Pack Air adds notable weight and bulk to the iPhone that elicited a fair amount of teasing. However, it did supply one full charge as promised.

Dexim Supercharged Leather Power Case for iPhone 4

### Dexim Supercharged Leather Power Case for iPhone 4

For its part, the Dexim Supercharged Leather Power Case for iPhone 4 (\$79.90) also offers protection and an extra charge, though with its leather exterior, the case is geared more toward business professionals. Unfortunately, Dexim's case looks cheaply made. There's the holster part where the phone slides in, but it never looks like it fits tightly even after the charging pins connect. A cutout on this back portion lets you shoot photos without removing the case.



Then there's a leather flap that flops down in front when the case is open, much like a sandwich board hinged the wrong way. At the top of the second flap is a hook closure that wraps around the top of the iPhone. It secured fine during my use, but I wasn't sold on it as a premium product. It's a bit heavier, too, at 3.8 ounces, and much bulkier than the Mophie case.

Externally, the Dexim case has a Micro-USB charging port just like the Mophie case, and a power switch to charge the iPhone from the case. Like its competitor, the Dexim Supercharged Leather Power Case supplied a full charge after the iPhone ran out of steam. However, it lacks Mophie's useful indicator for determining how much charge is left in the holster.

**Winner: Mophie Juice Pack Air**

You may bypass both of these options for charging cases, but for our money, we'd pick the Mophie Juice Pack Air. It may add weight and heft to the otherwise slim profile of your iPhone 4, but its handy power indicators and snug fit make it a better-constructed product.

Do you have a different favorite charging case? Share it in the comments.

# The Gazette

## **Your iPhone will get a charge out of this**

By Murray Hill

November 19, 2010

I use my iPhone for both business and personal use -- a lot -- and I sometimes run out of juice before the end of the day. The battery strength in the new iPhone 4 is a lot better than previous versions.

However, heavy users sometimes find a full charge in the morning won't make it through an entire day, especially if the day ends late in the evening.

One solution is to keep a charger handy when you're at your desk and make sure the phone is plugged in during the day. That works well, but I find if I spend a day out and about, by the end of the day I'm looking to recharge. I get twitchy when the power on the phone gets around 30 per cent or so.

I can turn push and 3G off to preserve battery life, but I like to have everything working fully. The solution for me is to get a Mophie Juice Pack Air for iPhone 4 battery pack.

The Juice Pack Air is a rechargeable battery inside a case that's designed to protect and recharge your iPhone 4. It's surprisingly thin and the two-piece shell clips onto the back of the iPhone with little effort.

As an external battery, the Juice Pack Air is designed to effectively double the amount of time you can use your phone. One flick of a little switch in the corner of the device provides a full recharge to your phone battery if you let it get down. Either way, the Juice Pack Air is an invaluable tool for heavy iPhone users.



## Mophie Juice Pack Universal Powerstation review

*We review the Mophie Juice Pack Universal Powerstation with an iPod and HTC Desire*

By Tom Brewster

November 23, 2010

For anyone with one of today's power hungry smartphones, battery power can often be a source of great frustration.

Many need plugging in after just a day or two of use, meaning users have to carry their cumbersome chargers around with them.

To ease people's battery-derived ire, various third parties have created small pieces of hardware to help provide phones with that much-needed boost.

The difference with Mophie's new Juice Pack Universal Powerstation is that it is actually quite large – around 3.5-inches long and two inches wide.



Confusing then that in the promotional materials for the product, Mophie says it will allow users to ditch "cumbersome power cords." The juice pack is arguably more of a bother to carry around than most phones' power supplies.

More ambiguities can be found in the instructions. While the juice pack is designed with Apple products in mind, in particular the iPhone, the iPod Touch and the iPad, it can work with numerous other devices. The thing is, Mophie isn't sure which ones.

"If you'd like to try it with your blueberry or slidekick, be our guest, but we do not guarantee the outcome," the instructions read. "If you do try it, feel free to give us a call and let us know what happened – could be exciting."

This lack of surety smacks of laziness when it came to testing. Would it have been that difficult to test out non-Apple devices? Or was Mophie not allowed to try it on other products? Guess we'll never know.

Anyway, outside of the power capabilities, the product is a delight. For a start it looks sleek, with a black and silver finish. Then there is the neat addition of a power-check button, with six LED lights to let the user know how much juice is left. While not offering a completely accurate representation of remaining power, it is a useful feature that you won't find on too many other devices.

So now for the real test – power. For this review we tried out an iPod and an HTC Desire and you can probably guess which device the charger preferred.

With the Apple product, it took barely any time or juice at all to get the iPod to full power, but the HTC was a different story altogether.

Indeed, in charging the iPod, the Powerstation lived up to its name. With 3,600 milliamps of whoomph it managed to fully charge the MP3 player without much apparent effort, with six LED lights still shining.

On the HTC, a notoriously power draining phone, it took a few hours to get the phone fully charged and at the end of it the

Powerstation was completely drained.

Furthermore, actually getting those pretty LED lights all lit up again takes a little too long, with around three to four hours needed to get the charger fully revved when hooked up to a Mac.

But regardless of the powerstation's peccadillos, it is a sturdy piece of equipment that Apple product owners could really benefit from. And the price tag is just about acceptable to boot.

## The Mophie Juice Pack Plus Protects and Powers Your iPhone 4

By Blake Robinson

December 3, 2010

The fact that Apple locks its batteries into its devices isn't just a design decision; it's a statement. Apple products are made with some of the best batteries on the market.

Regardless of this fact, even the most conservative iPhone 4 user is going to have a day that pushes the limits of his or her phone's built-in 1420 mAh battery. The Juice Pack Plus from Mophie — the same company that launched an iPhone-based credit card processing system earlier this year — adds an additional 2000 mAh battery within its shell, bringing the total onboard power to 3420 mAh and extending iPhone 4 use times by a large margin.

The case adds an additional eight hours of talk time, seven hours of Internet browsing, 11 hours of video playback and 44 hours of audio playback. By doing double duty as both a case and a backup battery, the Mophie Juice Pack Plus is one iPhone 4 case that's actually worth its \$100 price tag.





## **Mophie Juice Pack Plus Packs High-capacity Backup Battery**

By Dan Moren

December 3, 2010

Sometimes your iPhone just needs a little boost in the energy department. Whether it's an extra-long day or a forgot-to-charge-last-night pick-me-up, Mophie's new Juice Pack Plus for iPhone 4 can extend your device's battery power, all in a convenient package that slips on your phone.

As opposed to the company's \$80 Juice Pack Air, which features a 1500 mAh battery, the \$100 Juice Pack Plus packs a high-capacity 2000 mAh battery inside its hardshell case, supplementing it with a protective, shock-proof rubberized band that encircles the iPhone's edge--and it only adds an additional millimeter of thickness to your phone's sleek profile.

To switch to the backup battery, all you need to do is flip a switch on the case. Mophie says the power cell can more than double the phone's battery life; it's rated for an additional 8 hours of 3G talk time (or 16 hours on 2G), 7 additional hours of 3G Internet, 11 hours of Wi-Fi Internet, 44 hours of audio playback, or 11 hours of video playback. A handy four-LED status indicator lets you know how much charge is left in the battery at the touch of a button.

An included USB cable lets you charge and sync your phone while it's in the Juice Pack Plus and the case is constructed with a special acoustic chamber that Mophie says enhances the sound quality of the iPhone 4's speaker.

While the current shipping version only comes in black, Mophie says additional color choices of cyan, magenta, and yellow are coming soon.

# Cult of Mac

## **Mophie Juice Pack Plus Protects And Charges Your iPhone 4**

By John Brownlee

December 3, 2010

Mophie's back with another Juice Pack, this time meant to both charge and ensconce your iPhone 4, while simultaneously protecting it from drops and guarding the antenna from finger-induced signal attenuation.

Only a smidgen thicker than the Juice Pack Air — one millimeter, to be exact — the Juice Pack Plus actually packs a 33% higher capacity battery than its predecessor, all in a similar design with a colorful bumper-esque aesthetic and four LED lights that indicate the Juice Pack's remaining charge.

The Juice Pack Plus' battery is rated at 2,000mAh, which is enough for 8 additional hours of talktime and 7 additional hours of 3G connectivity. Colors include black, crayon, magenta and yellow; like its predecessor, the Juice Pack Plus charges through a micro-USB cable which passes through to your iPhone 4s dock connector for syncing and charging.

It looks like a solid update, but that update comes at a price: the Mophie Juice Pack Plus will cost you \$99.95, or \$20 over the Air.

## Mophie Juice Pack Plus iPhone 4 Battery Case Helps Double Battery Life

By Siyahi

December 6, 2010



Mophie has unveiled their new high-capacity battery case for iPhone 4. Juice Pack Plus, as it is called, is the second external rechargeable pack from Mophie.

### Mophie Juice Pack Plus iPhone 4 Battery Case Helps Double Battery Life

The ultra-thin, light weight juice pack battery case has a 2000 mAh capacity. This is more than what its earlier models brought to the users. Apart from extending the power life of iPhone 4 devices, the Mophie Juice pack Plus gives protection too.

It comes just 1 mm thicker than the earlier models. However it offers up to 8 hours of additional talk time on 3G networks and 16 hours additional talking hours on 2G networks.

You can rock your iPhone 4 with 7 additional hours of internet use on 3G while it is a whopping 11 hours on Wi-Fi networks. With the Juice Pack Plus, you can enjoy the music from your iPhone 4 for 44 additional hours. That's more than a mouthful, right? Well, the video playback gets 11 additional hours.

Apart from these additional hours, the battery case gives a bunch of features like acoustic sound enhancement, toggle switch to jump between standby and charging mode, and attached USB cable. Apart from this they come in a range of trendy colors- cyan, magenta and yellow.

In the US market, it will be costing around \$99.95 at their on-line stores or at AT&T stores nationwide.

# Rolling Stone

## 2010 Gift Guide

*Over 100 holiday ideas that will rock your stockings off*

December 7, 2010



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### Smartphone Accessories

**Mophie Juice Pack Air for iPhone 4:** Mophie's rechargeable iPhone case barely adds to the iPhone's slim profile, and can almost double the battery life. (\$80; [mophie.com](http://mophie.com))

**Jambox by Jawbone:** This sharp-looking Bluetooth device works as both a kickass tiny stereo speaker and a speakerphone. (\$200; [jawbone.com](http://jawbone.com))

## Process Credit Cards Anywhere: 5 Smartphone Tools

*Mobile-payment hardware lets your business accept credit cards through an iPhone, an Android handset or another smartphone.*

By Zack Stern

December 9, 2010

Whether you work as an in-home massage therapist, operate a taco truck, or run some other small business, you're missing sales if you can't process credit cards. However, a number of mobile payment tools now let you accept credit cards on an iPhone, an Android handset, a Windows Phone, or a dumber handset. You just need to sign up, attach credit card reader hardware, and navigate the fees.

Most of these tools require a merchant account. Banks regard credit card transactions similar to the way they do loans: Since they're afraid that you'll run up a bunch of sales with fraudulent cards, pocket the money, and book a flight to Bermuda before they catch on, they're stingy about granting access. You'll have to pass a credit check to earn a bank's trust and a merchant account.

Depending on the credit card tool, you'll pay a recurring fee for your merchant account, a percentage of each transaction, a flat fee per transaction, initial hardware costs, and possibly an additional monthly fee. This framework makes sense for businesses that process a lot of sales, keeping individual transaction fees low. But a wild-card service -- Square -- eliminates that monthly overhead, instead charging more per transaction.

We looked at five mobile devices and apps that enable small businesses to process credit card transactions. All provide the same basic functionality, but only some will match your specific needs.

### **RoamData RoamPay**

**Pros:** Works with more than 200 devices; includes many crucial transaction features and helpful extras

**Cons:** Weak interface cribs from ten-year-old, "dumb" phone designs

Roam Data's RoamPay distinguishes itself by its versatility. In addition to offering apps for iPhone, Android, and BlackBerry, the device works with more than 200 other handsets. Since it simply plugs in via the microphone jack, you can run credit card transactions on a Motorola Razr, a Palm Treo, and many more phones.

Unfortunately, the app-based, smartphone RoamPay interface seems merely scaled up from dumb-handset navigation. For example, it presents a numbered list of options on each page instead of buttons, and you need to tap twice to make selections. Instead of the credit card swiper automatically turning on, you have to press a button to activate it each time, and if you use too much force -- as we often did -- you can wind up bending the hardware into the iPhone's sleep button, KO-ing your POS.

The RoamPay software (or Website portal on app-free handsets) turns the audio from the swiper into credit card details. Data is encrypted in the hardware itself, then encrypted again on the phone before transmitting through your Internet connection. Get past the lousy interface, and the process works well, including some crucial features that others can miss, such as the capability to store transactions offline if your service is interrupted.

RoamPay is full of extras, such as a Web portal (for Mac or PC) where you can manually enter transactions. Although the device and app fundamentally work, we wish Roam Data had put more effort into the basic design before adding fancy

features.

The costs for RoamPay vary depending on where you buy it. One company, ACT Merchant Services, charges \$150 per year, 1.95 percent per transaction, and \$45 for the RoamPay hardware.

### **Square**

**Pros:** Simple setup process; free hardware and no monthly costs

**Cons:** Pricey for higher-volume businesses; lacks professional features

Square positions itself as the PayPal of mobile credit card transactions; it's simple, easy, and suitable for sole proprietors with occasional sales. The service charges a rate of 2.75 percent plus 15 cents per credit card transaction, with no hardware or monthly costs. If your business runs credit cards daily, you'll find a better deal with a competing service that adds in those costs but bills less per transaction.

Unlike other services, Square requires no merchant account. After Square verifies your identity by way of your Social Security number and other personal data, it sends you the free credit card reader. Getting started is easy, but if you make a mistake with the identity check -- we mixed up "north" and "south" on an old address -- you don't get a second chance. (You'll have to contact customer service for help.)

The Square app for iPhone and Android takes a simple approach to processing transactions. You plug the tiny reader into the headphone jack, key in a price, and start swiping. Just be sure to turn up the volume with this and other audio-based readers; it won't work if left quiet.

Note, however, that Square lacks features that can be important for many businesses. For instance, you can't refund or void transactions from the device; you have to do so with a computer and Web browser. And you can't store transactions offline if you lose the signal. Such omissions are just additional reminders that Square could be great for a part-time babysitter or artist, but weak for restaurants, street vendors, and other bigger businesses.

### **Intuit GoPayment**

**Pros:** Simple interface streamlines transactions; list-based system lets you tap regularly purchased items instead of manually entering numbers

**Cons:** Lacks complete features of some competitors, such as an offline mode and older returns

Intuit's GoPayment doesn't require -- or include -- a credit card swiper, as it allows you to manually enter numbers through any Internet-connected phone. But most businesses will want the convenience and lower fees of a card reader; we tested the Mophie Marketplace Credit Card Reader (\$180) on an iPhone 3G, and the Bluetooth Card Reader (\$150) with the Motorola Droid X. To protect each transaction, those card readers encrypt data before sending it to the phone.

GoPayment costs \$13 per month, 30 cents per transaction, and 1.7 percent for swiped charges. (Manually entered card numbers cost 2.7 percent.)

Since Select the items in your transaction, and then tap Create Order to quickly process a customer with Intuit GoPayment. GoPayment can accept multiple logins, several of your employees can run transactions; most other services force you to share a single account login. And since it's from Intuit, GoPayment also interacts with QuickBooks, sending that program your sales data.

GoPayment easily processes transactions. In most cases, the interface gets you in and out quickly, although Intuit could streamline it further. Unlike most competitors, it gives you the option to assemble a price list of your inventory and then just tap items to create orders; the process, if it matches your needs, will speed up transactions.

In GoPayment you'll find other crucial basics, too, such as the ability to void recent charges; it can e-mail a receipt to a customer, as well. The Mophie card-reader encases an iPhone 3G or 3GS but helpfully includes a micro-USB port so that you can still sync and charge the phone with it attached. (No iPhone 4 support is available yet.)

Even though GoPayment lacks a few features, such as an offline mode and refunds of older charges (you'll have to use a computer and Web browser for returns), it can reliably process business transactions. It's a solid choice that's ideal for businesses with a fixed price list.

## PhoneTransact iMerchant Pro

**Pros:** Requires a password to open the app; simple interface gets you through transactions quickly

**Cons:** Graph function lacks practical value; can't store offline transactions yet

iMerchant Pro tries to enliven your transactions with its clip-art-like interface and optional sound effects. Finish a sale, and you'll hear the classic cash register "ka-ching." Although these and other features clearly can't beat those of competitors, iMerchant Pro includes a surprisingly rare bonus: password protection. You can't launch this iPhone app without entering your personal password -- a simple, thoughtful security precaution.

Security is solid elsewhere, too. The hardware encrypts the card data before passing it to your phone, so the information stays safe.

iMerchant Pro software costs just \$1 on the iPhone, and the credit card swiper costs \$100. (New customers can get \$50 off that price.) You pay 1.69 percent and 24 cents for each swiped transaction. The service requires a gateway and merchant account; you can use your own merchant account, or pay about \$34 per month for both. The fees enable useful functions, including QuickBooks export.

The hardware latches onto an iPhone 3G or 3GS dock connection. However, unlike some devices, it omits a pass-through USB port for charging your phone or connecting to iTunes while it's attached.

The software is sufficient but imperfect. You can send receipts, void transactions, give credit refunds, and perform other basics. But some extras are just confusing, such as graphing transactions by credit card type into a pie chart. Sure, you can see the percentage of Visa to MasterCard transactions at a glance, but the feature just makes us want more-comprehensive sales reports. Why not chart the percentage of out-of-state visitors, high-sale transactions, sales by time of day, or other data useful to a business?

The app also can't store offline transactions and upload them later. That feature is coming soon, but for now you'll have to be certain that your Internet connection will hold up.

iMerchant Pro solidly performs its credit card transaction duties. Some features, such as password protection, add value -- but others, like the graphing, feel like placeholders for app updates.

## PayWare Mobile

**Pros:** Elegant swiper hardware includes stylus; reports page lists more details than most rivals

**Cons:** Awkward interface has glitches and inconsistencies

Get past the unintuitive, sometimes buggy PayWare Mobile interface, and you'll discover a solid foundation for business transactions. It's too bad that you have to fight to find the good parts of this iPhone credit card processor.

PayWare Mobile's main screen is streamlined to let you enter a transaction amount, swipe a card, and process a payment. But the interface weaknesses appear immediately. Does the big Manual Entry (or Slide Card) button mean that you're currently in manual (or card-reader) mode? It's the opposite of what we thought. Parts of the interface occasionally stopped responding to our touch, keeping us from tapping the cost field, for instance, or swapping the manual and swipe modes. Corner buttons sometimes change name within the same screen. The interface feels barely tested.

Although the software seems clunky, the hardware is surprisingly sleek. Blue-arrow lights identify the direction to swipe the card. A mini-USB port lets you charge, but it can't dock. An iPhone-savvy stylus hides inside the device, letting customers sign with the pointer instead of a fingertip. And the hardware encrypts data before it passes through the iPhone, protecting the information.

Considering the ho-hum interface, we were surprised by the attention to detail in the transaction reports. You can pull up lists of sales and even search for a certain one. Even though you can't run comprehensive reports, such as comparing sales between Mondays and Fridays over time, PayWare Mobile includes more data than most competitors do.

You'll find PayWare Mobile sold through merchant providers, such as iPhone Merchants. That company charges \$20 per month plus 1.59 percent and 25 cents per transaction, as well as a \$45 setup fee and \$115 for the hardware.

PayWare Mobile needs improvement. While its basic functionality matches -- and sometimes exceeds -- that of competitors, its awkward, glitch-prone interface isn't worth the trouble.

**The Verdict**

You'll have to crunch the numbers and assess your own needs to decide which up-front fees balance out lower per-transaction fees -- maybe your volume justifies such rates. Those costs aside, the right choice should match your business.

We like GoPayment's price-menu system for businesses with a small, fixed inventory. Otherwise, RoamPay's great features just barely lift it above its weak interface. For smaller businesses that don't want a merchant account and sell at low volumes, Square stands alone.