

Power 7 WiFi Card Reader(PNY) Datasheet



All product picture are for reference only

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Introduction

Power 7 WiFi Card Reader (Project Name: PNY) is a portable wireless storage device with one SD slot and one USB 2.0 host. PNY allows you to convert any SD memory card and USB external storage devices into a WiFi accessible media. Simply insert your SD memory card into the SD slot or connect your USB external storage into the built-in USB port. Switch the unit on and you can now wirelessly access your videos, music, photos, data and stream it to your iPad®, iPhone®, tablets, smartphones, and notebooks. There is no need to worry about running out of space on your mobile devices. For maximum portability, PNY has a built-in rechargeable battery. Simply plug it into any available USB port on your computer to charge. As simple as 1-2-3, you are ready to enjoy your device and no waiting needed. With the SD or External USB connected, the portable WiFi SD/USB can be accessed while the battery is charging. Without the wired limitation, you can enjoy listening to music while travelling with PNY in your backpack, share photo with your family by placing it at any house corner or lay back watching movies in the beach – with a range of up to 150ft you'll never feel tethered to your PNY. Best of all, the PNY can bridge the Internet connection to your existing wireless router, so you may access the data in the storage while surfing the Internet simultaneously.

Target Users/Markets

- **Mobile Device User**

iPhone®, iPad®, smartphone, tablet or notebook user may unleash from very limited storage capacity by throwing large files such as movies, music or powerpoint files to PNY.

- **Frequent Business Traveler**

Businessman may show customer the product datasheet, contract or quotation in PNY anytime in the coffee shop, meeting room or hotel.

- **Movies & Music Download Mania**

Have already downloaded hundreds or thousands of movies, music by BitTorrent at home but you can not enjoy watching or listening to them while you are outside? PNY is the solution for you.

- **Salesman**

PNY may save mobile sales person like insurance broker, realty broker from carrying bulky brochure or flyers.

- **Legacy USB External HDD Device Hater**

Just can not stand anymore to be tethered by USB cable whenever you need to transfer files between your notebook and external HDD? PNY is the answer for you!

- **Small Enterprise Mobile NAS**

The critical and confidential business data should not be bound to the file server or NAS in your company. PNY allows you to have a backup of your important data which is portable with you.



- **Home Mobile NAS**

With PNY at home, you do not need to always turn on your notebook or PC in order to share data with your family. Moreover, PNY can be your portable entertainment centre while your family go out for vacation.

Features

- **File and System Manager App**

Two way file transferring between PNY and your iPhone®, iPad®, smartphone, tablet or computer with Wi-Fi connectivity (802.11 b/g/n). Available iOS and Android mobile app with search utility function to find and locate specific data file.

- **Bridge to Internet Access**

Bypass your Internet access to your existing WiFi router, so you may access any data in the SD or HDD while surfing the Internet simultaneously.

- **WiFi SD or USB external HDD Accessible while Charging**

Using notebooks with available USB port or optional AC adaptor, the WiFi SD or USB external HDD can be accessed while charging the internal battery.

- **Share with Friends & Family**

Allow 7.5 maximum concurrent connections for sharing videos, audios, photos and data.

- **Extended Battery Life**

Up to 10 hours of continuous use battery life for maximum portability.

- **USB 2.0 Host for Data Sync and Battery Charging**

USB 2.0 port for faster transfer between SD and PC.

Easy to Configure and Operate

Friendly user interface design with wizard guide to assure even the novice can get PNY start to operate in minutes.

Applications

- **Bridge to Internet Access**

Scenario 1 - If you got an existing WiFi router for Internet access



Wirelessly Bridge to Internet Access

- **Connect to the USB Port**

Scenario 1 - Press power switch button off and then connect to the USB port of notebook, PNY works solely as an SD reader with power charge to extend usage time



PNY works as a SD reader only

Scenario 2 - Press power switch button on and then connect to USB port of notebook, PNY works solely as a WiFi SD or USB external HDD/Flash with power charge to extend usage time



PNY works as a WiFi SD reader or USB external HDD



Hardware Specifications

Project name	PNY	
Model name	P-R2000-1AMKK01-RB, P-R2000-1AMKK01-FR	
CPU	Model	Ralink RT5350
	Frequency	MIPS24KEc 360MHZ
Flash	Model	EN25Q64-104WIP
	Capacity	8MByte SPI flash
SDRAM	Model	M12L2561616A-6TG (SDRAM)
	Capacity	32MB (256Mbit)
WiFi	standard	802.11 b/g/n
	Frequency	2.4GHz
	Speed	72Mbps for 20MHz 150Mbps for 40MHz
Interface	Battery LED (Green&Red)	LED light to show the battery status right after power on: Green: $\geq 30\%$ Red: $< 30\%$ Red LED fast flash: $< 10\%$ depleting Green LED slow flash: Every 2 seconds for charging Every 1.5 seconds for shutting down
	WiFi LED (Blue)	WiFi LED shows the system initiating state: Start flashing: Kernel loading in process Stop flashing: System initiation completes Fast blinking: Reading or writing
	Internet LED (Green)	Internet LED state: Extinguishing: No connection Flashing: Connecting underway Solid green: Connecting successfully
	SD card slot	Support SD/SDHC,SDXC up to 2TB
	Power button	Power on/off switch button
	Reset button	Factory default reset button
	USB device interface	Micro USB 2.0
	USB host interface	USB 2.0: Support USB flash/HDD Support 1A output current charging for iPhone®, smartphone.
Antenna	Signal strength	2.5dBi (WiFi component) 18dBm (Main chip)

Battery	Capacity	2000mAh Li-ion Polymer battery
	Charging current	Max 1000mA
Power dissipation	Max power dissipation (tested with SD read/write without USB storage activity) * It will vary slightly with different type of SD	2W
	Standby power (tested with TOSHIBA 1TB HDD,HDD slept during the test)	1.5W
Environmental requirements	- Operating Temperature: 5°C to 35°C - Non-Operating Temperature: 0°C to 60°C - Operating Humidity: 5% to 90% (Non-condensing) - Non-operating Humidity: 5% ~ 90 % (Non-condensing)	
Product dimension	118mm (L) x 79mm (W) x 14mm (H)	
Emission (EMI), Safety & Other Certifications	- FCC Class B - CE	

Interface Illustration



PNY Interface Illustration



Software Specifications

System setting	Language selection	To select your native languages
	Firmware upgrade	To upgrade firmware by web browser
	Configuration setting	To backup and retrieve system configuration setting
	Factory default setting restore	To restore default system setting originated in factory production
File system	FAT16/FAT32	A) Support Microsoft Windows FAT16/FAT32 file system B) Application tools: FAT file system inspection and repair tool
File service	CIFS protocol	Provide shared services to files and printers for clients on Microsoft Windows Network
	Samba service	Provide shared services to files and printers for clients on Microsoft Windows Network and Unix-Like Network
HTTP(S) service	OS	A build-in browser which support common operation system such as Windows, Linux, Mac® OS and smart terminal for easy management
	WebDAV protocol	Makes the Web a readable and writable medium which allow users to edit and manage documents and files stored on World Wide Web servers
Access control	Password protection	A) WiFi access control: • None • WPA • WPA2 • WPA&WPA2 B) WEB access control • Password login C) Samba access control • Password login Default security: A) Authentication needed with password 11111111 B) No authentication C) No authentication
Network Management	WiFi setting	A) WiFi login history cache B) WiFi auto login



		A) Available wireless networks display
	side setting	A) PNY IP setting B) Subnet mask setting C) DHCP server setting D) Default gateway setting E) Default DNS setting
Application software	Client	A) Windows XP/2003/Vista/7, Linux, Unix, Mac® B) Android: tablet, smartphone C) iOS: iPad®, iPhone®
File Formats	iOS Client	A) Audio: Support formats of MP3 , AAC , m4a , wav , aiff B) Video: Support formats of MP4 , MOV , m4v , avi C) Photo: Support formats of jpg , tiff , bmp , gif(image) D) Document: Support formats of keynote , numbers , page , excel , word , pdf , txt , ppt
	Android Client	A) Audio: Support formats of MP3 only at present B) Video: MP4 C) Photo: Support formats of jpg , .png D) Document: Support formats of txt , word , excel , ppt and pdf

File & System Manager App

- Support the keyword search function from the current folder
- Support the file list/thumbnail view, support thumbnail images show and MP3 artwork shows; Support gravity sensor switch direction
- Support checkmark/delete function and support local/WiFi Storage data transmission in between
- Playing music/video/photos by iPhone®, iPad® and tablet and smartphone (JPG, mp3, mp4, decoding ability more dependent on the system, file format depend on the player software installed on you device, Power7 suggest to use RockPlayer/Mobo player on the Android and Oplayer/GoodPlayer on iOS)
- Support to play the photos by filmstrip mode and support background music playing
- Support video drag and play
- Support music artwork shows, circulation play set, drag operation
- Support email to send out pictures/documents
- Support network and PNY's parameters setting
- Transfer videos and photos from and to the iPhone®, iPad® to PNY

System Requirements

- iPhone®, iPad®, smartphone, tablet or computer with Wi-Fi connectivity (802.11 b/g/n)
- Mac® or PC computer running Windows 7, Windows Vista, Windows XP or Mac OS X 10.6.0 or later operating system for loading media on to PNY via USB

Client Tools

■ Computer Client Tool

- Auto search and access the PNY on WLAN
- Supports Windows XP/2003/Vista/7 and Mac® iOS operation system

■ Mobile Application Tool

- Supports iOS (iPhone® and iPad®) and Android (smartphone and tablet)
- Stream audios and videos and view photos from the PNY



FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.