

Letter of Volatility				
Model Number:	Part Number:	Manufacturer:		
HP PageWide Pro MFP 477dn	D3Q19	Street Address: HP, Inc. 1115 SE 165 th Ave, Suite 210 Vancouver, WA 98683		
Volatile Memory				
Does the item contain volatile memory (i.e., memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
If the answer is "Yes", please provide the following information for each type (use additional sheets if required)				
Type (SRAM, DRAM, etc.):	Size:	User Modifiable:	Function:	Process to Sanitize:
DDR3 DRAM	512MB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Contains decompressed system firmware and print data during printing.	Power Off printer
Non-Volatile Memory				
Does the item contain non-volatile memory (i.e., memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Type (eMMC, Flash, EEPROM, etc):	Size:	User Modifiable:	Function:	Process to Sanitize:
NAND Flash	256MB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	System Firmware including firmware updates, system control data, user preferences, and stored print and FAX jobs. This function can be disabled and settings locked using admin password.	User preferences cleared by performing various resets via "Support" menu. Access from Home menu by pressing "back, back, back, back". Stored print and FAX jobs cleared through printer embedded Web server functions. See the Administrator's Guide for more details.
Type (eMMC, Flash, EEPROM, etc):	Size:	User Modifiable:	Function:	Process to Sanitize:
EEPROM (2 separate devices)	32KB and 32KB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Contains system control data, user preferences, and variables.	Cleared by performing various resets via "Support" menu. Access from Home menu by pressing "back, back, back, back". See the Administrator's Guide for more details.
Type (eMMC, Flash, EEPROM, etc):	Size:	User Modifiable:	Function:	Process to Sanitize:
EEPROM	64KB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Contains backup of critical system control data and critical user preferences.	N/A, no user data stored.
Type (eMMC, Flash, EEPROM, etc):	Size:	User Modifiable:	Function:	Process to Sanitize:
Secure EEPROM	17KB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Contains secure internal printer data.	N/A, no user info stored here.
Media				
Does the item contain media storage capability (i.e., removable or non-removable disk drives, tape drives, memory cards, etc.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				

Type (Disk, Tape, Memory Card, etc): USB thumb drive (user supplied) Removable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Size: User supplied	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Optionally supplied by the user. Stored print and FAX jobs can be stored onto an external thumb drive. Stored jobs are encrypted using keys unique to the individual printer. This function can be disabled and settings locked using admin password.	Process to Sanitize: Stored print and FAX jobs cleared through printer embedded Web server functions.
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Additional Information:

USB

Does the item accept USB input and if so, for what purpose (i.e., Print Jobs, device firmware updates, scan upload)?

- Yes If yes, describe below
 No

Additional information:

The rear type B USB port can accept print and FAX jobs, printer configuration, and return printer status.
The front, type A USB post can be used for providing files and photos to be printed, and to stored scan data.

The function of the USB ports can be disabled and settings locked using admin password.

Can any data other than scan upload be sent to the USB device?

- Yes If yes, describe below
 No

Additional Information:

A thumb-drive can be added to the rear USB A port and the printer configured to use it to store stored print jobs. The files are encrypted using AES 256 encryption and cipher keys unique to the individual printer.

This function can be disabled and settings locked using admin password.

The function of the USB ports can be disabled and settings locked using admin password.

RF/RFID

Does the item use RF or RFID for receive or transmit any data including remote diagnostics (e.g., Cellular Phone, WIFI, or Bluetooth)?

- Yes If yes, describe below
 No

Purpose:

Wireless information string

Frequency:

13.56MHz

Bandwidth:

106 – 424Kbs

Modulation:

Manchester, 10% ASK

Effective Radiated Power (ERP):

Not an intentional radiator. Load modulation as passive tag emulation.

Additional Information:

Other Transmission Capabilities

Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g., anything other than standard hard-wired TCP/IP, direct USB, or parallel connections)?

<input type="checkbox"/> Yes If yes, describe below <input checked="" type="checkbox"/> No			
Frequency:		Bandwidth:	
Modulation:		Effective Radiated Power (ERP):	
Additional Information:			
Other Capabilities			
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever?			
<input checked="" type="checkbox"/> Yes If yes, describe below <input type="checkbox"/> No			
Purpose:			
FAX			
Specifications:			
T.30 FAX protocol standard for FAX communication. Within T.30 – V.21 protocol as control channel Within T.30 -- V.23, V.32, and V.34 as data transfer protocols			
Additional Information:			
This product can send and receive FAX transmissions over a standard telephone line.			
Vendor Engineer/SME Representative Information			
Name:	Title:	Email:	Business Unit:
Sing Wah Chew	Technical Marketing Engineer	technical.marketing@hp.com	IPG
Name:	Title:	Email:	Business Unit:
David Gembala	Lead Electrical Engineer	technical.marketing@hp.com	IPG
Name:	Title:	Email:	Business Unit:
Carl Peterson	Firmware Program Manager	technical.marketing@hp.com	IPG
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