

Printer and MFP security features



The table below shows a list of embedded device security features and availability of those features across HP Enterprise-class¹ printers and MFPs and competitor devices. This data is provided to support the relative claim of “most secure” printers.

A4 class devices

	HP ³	Canon ⁴	Konica Minolta ⁵	Kyocera ⁶	Lexmark ⁷	Oki Data ⁸	Ricoh ⁹	Xerox ¹⁰
Secure boot ²	✓		✓		✓		✓	
with self-healing	✓							
Whitelisting ²	✓		✓		✓		✓	
Intrusion detection (run-time memory inspection) ²	✓							
with self-healing	✓							
Network behavior anomaly detection	✓							
SIEM integration	✓	✓			✓			
802.1x network authentication	✓	✓	✓	✓	✓	✓	✓	✓
Access Control lists (ACL)	✓	✓	✓	✓	✓	✓	✓	✓
Active Directory integration	✓	✓	✓	✓	✓	✓	✓	✓
Bluetooth Low Energy	✓	✓	✓					
Configurable CA certificate	✓	✓	✓		✓	✓	✓	✓
Configurable device identity certificate	✓	✓	✓		✓	✓	✓	✓
Digitally signed firmware/software	✓	✓	✓	✓	✓	✓	✓	✓
Disable network ports and protocols	✓	✓	✓	✓	✓	✓	✓	✓
Disable physical ports (USB, parallel, etc.)	✓	✓	✓	✓	✓	✓	✓	✓
Embedded encrypted HDD	✓	✓	✓					
Embedded FIPS 140	✓							✓
Embedded NFC hardware	✓							
Embedded secure file erase	✓	✓	✓		✓		✓	✓
Embedded secure storage erase	✓	✓	✓		✓		✓	✓
Embedded Wi-Fi Direct	✓		✓	✓	✓	✓		
Encrypted and hashed PINS and passwords	✓	✓	✓	✓	✓	✓	✓	✓
Encrypted email	✓	✓	✓	✓	✓	✓	✓	✓
Encrypted print	✓	✓	✓	✓	✓	✓	✓	✓
Fax lock PIN	✓	✓	✓	✓	✓	✓	✓	✓
Hardware Integration Pocket for security solutions	✓		✓	✓	✓	✓	✓	
IPP encrypted printing	✓	✓	✓	✓	✓	✓	✓	✓
IPsec	✓	✓	✓	✓	✓	✓	✓	✓
LDAP integration	✓	✓	✓	✓	✓	✓	✓	✓
Multiple user PINs (on the device)	✓	✓	✓	✓	✓	✓	✓	✓
Novell integration	✓	✓	✓	✓	✓	✓	✓	✓
Password complexity as default								
Role-based access to control panel features	✓	✓	✓	✓	✓		✓	✓
Secure SMTP server (HTTPS)	✓	✓	✓	✓	✓	✓	✓	✓
Security event logging	✓	✓	✓	✓	✓		✓	✓
Single sign-on (on device)	✓	✓	✓	✓	✓		✓	
SNMPv3	✓	✓	✓	✓	✓	✓	✓	✓
TLS 1.1/1.2	✓	✓	✓	✓	✓	✓	✓	✓
Trusted Platform Module (TPM)	✓	✓	✓	✓			✓	
Turn on/off Remote Firmware Upgrade (RFU) on device	✓				✓			✓
TOTALS	40	29	32	24	31	22	29	26

A3 class devices

	HP ¹¹	Canon ¹²	Konica Minolta ¹³	Kyocera ¹⁴	Lexmark ¹⁵	Ricoh ¹⁶	Sharp ¹⁷	Toshiba ¹⁸	Xerox ¹⁹
Secure boot ²	✓		✓		✓	✓			
with self-healing	✓								
Whitelisting ²	✓		✓		✓	✓			✓
Intrusion detection ² (run-time memory inspection)	✓								
with self-healing	✓								
Network behavior anomaly detection	✓								
SIEM integration	✓	✓			✓				
802.1x network authentication	✓	✓	✓	✓	✓	✓	✓	✓	✓
Access Control lists (ACL)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Active Directory integration	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bluetooth® Low Energy	✓	✓	✓						
Configurable CA certificate	✓	✓	✓		✓	✓		✓	✓
Configurable device identity certificate	✓	✓	✓		✓	✓	✓	✓	✓
Digitally signed firmware/software	✓	✓	✓	✓	✓	✓	✓	✓	✓
Disable network ports and protocols	✓	✓	✓	✓	✓	✓	✓	✓	✓
Disable physical ports (USB, parallel, etc.)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Embedded encrypted HDD	✓	✓	✓				✓	✓	✓
Embedded FIPS 140	✓							✓	✓
Embedded NFC hardware	✓	✓	✓						
Embedded secure file erase	✓	✓	✓		✓	✓	✓	✓	✓
Embedded secure storage erase	✓	✓	✓		✓		✓	✓	✓
Embedded Wi-Fi Direct®	✓		✓		✓		✓	✓	
Encrypted and hashed PINs and passwords	✓	✓	✓	✓	✓	✓	✓	✓	✓
Encrypted email	✓	✓	✓	✓	✓	✓	✓	✓	✓
Encrypted print	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fax lock PIN	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hardware Integration Pocket for security solutions	✓		✓	✓	✓	✓			✓
IPP encrypted printing	✓	✓	✓	✓	✓	✓	✓	✓	✓
IPsec	✓	✓	✓	✓	✓	✓	✓	✓	✓
LDAP integration	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multiple user PINs (on the device)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Novell integration	✓	✓	✓	✓	✓	✓	✓	✓	✓
Password complexity as default									
Role-based access to control panel features	✓	✓	✓	✓	✓	✓	✓	✓	✓
Secure SMTP server (HTTPS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Security event logging	✓	✓	✓	✓	✓	✓	✓	✓	✓
Single sign-on (on device)	✓	✓	✓	✓	✓	✓			✓
SNMPv3	✓	✓	✓	✓	✓	✓	✓	✓	✓
TLS 1.1/1.2	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trusted Platform Module (TPM)	✓	✓	✓			✓			
Turn on/off Remote Firmware Upgrade (RFU) on device	✓				✓				✓
TOTALS	40	30	33	22	31	28	25	27	30

Methodology

Analysis done by HP and is based on published information from websites, data sheets, and brochures of leading competitive brands and representative in-class devices. Information provided is to the best of our knowledge.

Notes

- ¹ HP Enterprise-class printers and MFPs use HP FutureSmart firmware and HP claims of “most” secure are specific to FutureSmart devices.
- ² A FutureSmart service pack update may be required to activate security features. Some features will be made available as an HP FutureSmart service pack update on select existing Enterprise printer models. For a list of compatible products, please see our “Embedded security features compatibility matrix” at <http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=4AA6-1178ENW>.

A4 source data

Competitors listed below websites, data sheet, spec sheets, brochures, white papers, catalogues, and other public information as of July 2018.

3	4	5	6
HP	Canon	Konica Minolta	Kyocera
M681	IR ADV C355	bizhub C3851	TASKalfa 406
M633	IR ADV C350	bizhub C3351	TASKalfa 356
M527	IR ADV C255	bizhub C3110	TASKalfa 307
PW 586	IR ADV C250	bizhub 4752	TASKalfa 306
		bizhub 4750	
7	8	9	10
Lexmark	Oki Data	Ricoh	Xerox
CX860	MC873	MP C407	VersaLink C605
CX825	MC853	MP C401	VersaLink C505
CX820	MC780	MP C307	VersaLink C405
CX725	MC770	MP C306	VersaLink C600
CX517	MC760	MP C305	VersaLink C500

A3 source data

Competitors listed below websites, data sheet, spec sheets, brochures, white papers, catalogues, and other public information as of July 2018.

11	12	13	14
HP	Canon	Konica Minolta	Kyocera
E87660	IR ADV 8505	bizhub C759	TASKalfa 8052
E87650	IR ADV 8595	bizhub C659	TASKalfa 7052
E87640	IR ADV 8585	bizhub C658	TASKalfa 6052
E77830	IR ADV C7580	bizhub C558	TASKalfa 5052
E77825	IR ADV C7570	bizhub C458	TASKalfa 4052
E77822			
15	16	17	18
Lexmark	Rioch	Sharp	Toshiba
CX924	MP C8003	MX-6050	e-STUDIO 7506
CX923	MP C6503	MX-5070	e-STUDIO 6508
CX922	MP C6004	MX-3550	e-STUDIO 5508
CX921	MP C5504	MX-3050	e-STUDIO 5005
	MP C4504	MX-2630	e-STUDIO 4505
19			
Xerox			
AltaLink C8070			
AltaLink C8055			
AltaLink C8045			
AltaLink C8035			
AltaLink C8030			



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