

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	DELL ⁵	Konica Minolta ⁶	Kyocera ⁷	Lexmark 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	39	28	26	26	23	28	30	30

A3 class devices

	HP ³	Canon ¹¹	Konica Minolta ¹²	Kyocera ¹³	Lexmark ¹⁴	Ricoh ¹⁵	Sharp ¹⁶	Toshiba ¹⁷	Xerox ¹⁸
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	39	27	31	22	30	28	25	27	28

Methodology

Analysis done by HP and is based on published information from websites, data sheets, 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 September 2017.

3	5	7	9
HP	DELL	Kyocera	Ricoh
M527	C3765dnf	M6526cdn	MP C406
M553	C5765dnf	M6530cdn	MP 4054
M577	C7765dn	406ci	MP C306
556 PW	52825cdn	356ci	MP C3004SP
M586PW		306ci	MP C6004
4	6	8	10
Canon	Konica Minolta	Lexmark	Xerox
IR ADVANCE 4245	bizhub C258e	CS720de	WorkCentre 6655i
IR ADVANCE 5255	bizhub C287	CS820de	WorkCentre 7225i
IR ADVANCE C350iF	bizhub C368	CX860de	WorkCentre 7845i
IR ADVANCE C1030iF	bizhub 4020	MS911de	ColorQube 8700
IR ADVANCE C3330i	bizhub C3110	CX825	ColorQube 8900

A3 source data

Competitors listed below websites, data sheet, spec sheets, brochures, white papers, catalogues, and other public information as of September 2017.

11	13	15	17
Canon	Kyocera	Ricoh	TOSHIBA
IR ADV C5255I	TASKALFA 5551CI	AFICIO MP C5503	E-STUDIO 5560C
IR ADV C5250I	TASKALFA 4551CI	AFICIO MP C4503	E-STUDIO 4555C
IR ADV C5235I	TASKALFA 3551CI	AFICIO MP C3503	E-STUDIO 3555C
IR ADV C3325I	TASKALFA 2551CI	AFICIO MP C3003	E-STUDIO 2555C
12	14	16	18
Konica Minolta	Lexmark	Sharp	Xerox
bizhub C554E	X954DE	MX-6240N	WorkCentre 7855
bizhub C454E	X950DE	MX-5141N	WorkCentre 7845
bizhub C368	C935	MX-4070N	WorkCentre 7835
bizhub C308	X925E	MX-2614N	WorkCentre 7225



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