# QuickSpecs

#### **Technical Specifications**

#### **HP USB Business Slim Smartcard Keyboard**

#### Models

HP USB Business Slim Smartcard Keyboard

**Z9H48AA** 

#### **Compatibility**

The HP USB Business Slim Smartcard Keyboard is compatible with HP ProDesk 400 G4 SFF, HP ProDesk 400 G4 MT, HP ProOne 400 G3 AlO Touch, HP ProOne 400 G3 AlO Touch, HP ProDesk 600 G3 MT, HP ProDesk 600 G3 DM, HP ProDesk 600 G3 SFF, HP ProDesk 600 G3 Desktop Mini, HP ProOne 600 G3 AlO 21.5" Non-Touch, HP EliteDesk 800 G3 TWR., HP EliteDesk 800 G3 SFF, HP EliteDesk 800 G3 35W Desktop Mini, and HP EliteDesk 800 G3 65W Desktop Mini.

**NOTE:** Not all models are available in all regions.

#### **Service and Support**

Your Option Limited Warranty is a one (1) year (HP Option Limited Warranty Period) parts replacement warranty on any HP-branded or Compaq-branded options (HP Options). If your HP Option is installed in an HP Hardware Product, HP may provide warranty service either for the HP Option Limited Warranty Period or the remaining Limited Warranty Period of the HP Hardware Product in which the HP Option is being installed, whichever period is the longer but not to exceed three (3) years from the date you purchased the HP Option.

Physical Characteristics	Keys	104, 105, 109 layout (depending upon country
	Dimensions (H x W x D)	17.34 x 5.68 x 0.78 in (440.6 x 14.45 x 1.98 cm)
	Weight	1.32 lb (0.6± 0.1 kg)
Electrical	Operating voltage	5V
	Power consumption	200 mA
	System interface	USB Interface
	ESD	Air 12.5kV / Contact 8kV
	EMI - RFI	under 3dB
	Microsoft PC 99 - 2001	Conforms to FCC rules for a Class B computing device
Mechanical	Keycaps	Low-profile design
	Switch actuation	60±15g nominal peak force with tactile feedback
	Switch life	10 million keystrokes (Life tester)
	Switch type	Contamination-resistant switch membrane
	Key-leveling mechanisms	For all double-wide and greater-length keys
	Cable length	6 ft (1.8 m)
Environmental	Acoustics	43-dBA maximum sound pressure level
	Operating temperature	50° to 122° F (10° to 50° C)
	Non-operating temperature	-22° to 140° F (-30° to 60° C)
	Operating humidity	10% to 90% (non-condensing at ambient)
	Non-operating humidity	20% to 80% (non-condensing at ambient)
	Operating shock	40 g, six surfaces
	Non-operating shock	80 g, six surfaces
	Operating vibration	2-g peak acceleration
	Non-operating vibration	4-g peak acceleration
	Drop (out of box)	26 in (66 cm) on carpet, six-drop sequence



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Drop 30 in (76.2 cm) on concrete, 16-drop sequence

(in box)

SmartCard Function Support All ISO 7816 smart cards

Interface Reads from and writes to all ISO7816-1, 2, 3, 4 memory

and microprocessor smart cards (T=0, T=1)

Chipset IDENTIVE CLOUD 2190 F
Standard APIs supported PC/SC, EMV2000, CT-API

Power USB Port

Short circuit detection (protects smart card and reader) Power supply compliant with ISO7816 and EMV (5V, 60

mA)

Supports 3-V and 5-V cards

Power consumption 100-mA maximum draw

Communication From card 9600 bps to 330,000 bps

From computer 12 Mbps (USB transfer speed)

Landing mechanism Contact device Friction contact

Card insertions rating Up to 100,000 insertion cycles

Interface modes CCID protocol
Reader performance interface USB connection

Electro-magnetic standards Europe 2004/108/EC

USA USAFCC part 15

Approvals CE Marking; TUV; EAC; FCC; cULus/CSAus; ICES; RCM; VCCI; KCC; BSMI

**Ergonomic Compliance** ISO 9241-410, TUV GS

**Kit Contents** Keyboard, I/O Security and Documentation CD, warranty card

\*NOTE: The functional keys for brightness adjustment are only available with notebook and Integrated displays with HP hot key support software.

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### **Technical Specifications**

Date of change:	Version History:		Description of change:
August 15, 2019	From V1 to v2	Update	NOTE added to specs

