



## Wi-Fi CERTIFIED™ Interoperability Certificate

This certificate lists the features that have successfully completed Wi-Fi Alliance interoperability testing.  
Learn more: [www.wi-fi.org/certification/programs](http://www.wi-fi.org/certification/programs)



**Certification ID: WFA55947**

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<b>Date of Last Certification</b>	August 19, 2014
<b>Company</b>	Microsoft
<b>Product</b>	Miracast Dongle
<b>Model Number</b>	HD-10
<b>Product Identifier(s)</b>	
<b>Category</b>	Gaming, Media & Music
<b>Subcategory</b>	Media Adapter
<b>Hardware Version</b>	Product: 1.0, Wi-Fi Component: 1.0
<b>Firmware Version</b>	Product: 2.0, Wi-Fi Component: 2.0
<b>Operating System</b>	Linux
<b>Frequency Band(s)</b>	2.4 GHz

### Summary of Certifications

<b>CLASSIFICATION</b>	<b>PROGRAM</b>
Connectivity	Wi-Fi CERTIFIED™ b, g, n
	WPA™ - Personal
	WPA2™ - Personal
	Wi-Fi Direct®
Optimization	WMM®
Access	Wi-Fi Protected Setup™
Applications & Services	Miracast® - Display



**Security**

WPA™ - Personal  
WPA2™ - Personal

**Wi-Fi CERTIFIED™ b**

**Wi-Fi CERTIFIED™ g**

**Wi-Fi CERTIFIED™ n**

2.4 GHz  
2 Spatial Streams 2.4 GHz  
Short Guard Interval  
STBC Receive  
40 MHz operation in 2.4 GHz, with coexistence mechanisms  
HT Duplicate Mode (MCS 32)  
Reduced Interframe Space (RIFS)

**Wi-Fi Direct®**

2.4 GHz

**WMM®**

**Wi-Fi Protected Setup™**

2.4 GHz  
PIN  
Push-Button (PBC)

**Miracast®**

Release 1  
Display Device