

# Mercury-based Wavestore WS-MP & WS-MR Controller Comparison Chart

	WS-MP4502	WS-MP2500	WS-MP1501	WS-MP1502	WS-MR50-S3	WS-MR52-S3B	WS-MR16IN-S3	WS-MR16OUT-S3
Open Architecture	✓	✓	✓	✓	✓	✓	✓	✓
<b>General</b>								
Ships with MercOS 2.x	✓	✓	✓	✓	--	--	--	--
Number of Openings Managed Max	64	64	17	64	1	2	--	--
Number of Readers Managed Max	64	64	17	64	--	--	--	--
Number of Downstream RS485 IO Ports	2	2	1	1	--	--	--	--
Number of IO Modules Max	32	32	8	32	--	--	--	--
Number of Readers Directly Connected Max	4	0	2	4	2	4	--	--
Power Cycle MP Reader Port Remotely	✓ (pending FW)	✓ (pending FW)	✓ (pending FW)	✓ (pending FW)	--	--	--	--
Cardholder Max	2,000,000	600,000	240,000	240,000	--	--	--	--
Event Transaction Buffer Capacity	500,000	500,000	500,000	500,000	--	--	--	--
Access Levels per Cardholder	255	255	255	255	--	--	--	--
Inputs Managed Max	1024	1024	130	520	--	--	--	--
Outputs Managed Max	1024	1024	130	516	--	--	--	--
Number of On-Board General Purpose Inputs	8	0	2	8	2	8	16	0
Number of On-Board General Purpose Outputs	4	0	2	4	2	6	2	16
Relay Rating Max @ 30VDC	5A	--	2A	5A	5A/2A	5A	5A	5A
Micro USB Port	✓	✓	✓	✓	--	--	--	--
microSD or microSDHC Card (2GB - 8GB)	✓	✓	✓	✓	--	--	--	--
<b>Electrical</b>								
12 VDC Consumption Max	500 mA	500 mA	1.8 A	500 mA	150 mA	550 mA	350 mA	1100 mA
802.11at PoE Consumption Max	--	--	12.95 W	--	--	--	--	--
802.11af PoE+ Consumption Max	--	--	25 W	--	--	--	--	--
12 VDC Lock/Reader Power Max using PoE +	--	--	1.25 A	--	--	--	--	--
Reader Power Out per Port Max	600 mA	--	600 mA	600 mA	300 mA	300mA	--	--
Micro USB Port Power Out	5 VDC	5 VDC	5 VDC	5 VDC	--	--	--	--
Super Capacitor Memory/ Clock Backup	✓	✓	✓	✓	--	--	--	--
CR2330 Battery Memory/Clock Backup*	✓	✓	✓	✓	--	--	--	--
<b>Security and Network</b>								
Ethernet Speed (Mbps)	10/100	10/100	10/100	10/100	--	--	--	--
Internet Protocol	v4/v6	v4/v6	v4/v6	v4/v6	--	--	--	--
Dual IP Connectivity (using adapter)	✓	✓	✓	✓	--	--	--	--
OSDP Secure Channel for On-Board Reader Ports	✓	N/A	✓	✓	✓	✓	--	--
Crypto Memory Chip	✓	✓	✓	✓	✓	✓	✓	✓
Upstream Encryption	TLS / AES	TLS / AES	TLS / AES	TLS / AES	AES	AES	AES	AES
Peer Certificate Loading	✓	✓	✓	✓	--	--	--	--
IP Device Management via SNMP	✓	✓	✓	✓	--	--	--	--
IP Device Discovery via Zeroconf (mDNS)	✓	✓	✓	✓	--	--	--	--
Port Based Access Control using 802.1X (EAP-TLS)	✓	✓	✓	✓	--	--	--	--
NIST Certified Encryption (FIPS 140-3)	✓	✓	✓	✓	--	--	--	--
ARM TrustZone Security	✓	✓	✓	✓	--	--	--	--
Secure Boot Processor	✓	✓	✓	✓	--	--	--	--
Data Encryption at Rest	✓	✓	✓	✓	--	--	--	--
<b>Third Party Integrations and Applications</b>								
Future-ready Secure APP Environment	✓	✓	✓	✓	--	--	--	--
Elevator Destination Dispatch	✓	--	--	--	--	--	--	--
BACnet/IP Building Control Integration	✓	--	--	--	--	--	--	--
FICAM Strong Authentication for FIPS-201 US Gov.	✓ (pending FW)	--	--	--	--	--	--	--
Wireless Lock Hub Support	✓	✓	✓	✓	--	--	--	--
Power Supply Alerts and Events	✓	✓	✓	✓	--	--	--	--
<b>Environmental / Mechanical</b>								
Storage Temperature (° C)	-55° to 85°	-55° to 85°	-55° to 85°	-55° to 85°	-55° to 85°	-55° to 85°	-55° to 85°	-55° to 85°
Operating Temperature (° C)	0° to 70°	0° to 70°	0° to 70°	0° to 70°	0° to 70°	0° to 70°	0° to 70°	0° to 70°
Humidity (RHNC)	5 to 95%	5 to 95%	5 to 95%	5 to 95%	5 to 95%	5 to 95%	5 to 95%	5 to 95%
Dimensions (W x L x H mm)	203 x 152 x 25	127 x 152 x 25	140 x 70 x 24	203 x 152 x 25	70 x 108 x 25	203 x 152 x 25	203 x 152 x 25	203 x 152 x 25

\* CR2330 Battery not included