

# IRF COMPATIBILITY FOR HPE NETWORKING SWITCHES (Nov. 2016)

Switch Series	Maximum devices in IRF domain	IRF link capacity	Max Physical Ports per IRF-Port	Notes	Number of active links per agg. group	Number of agg. groups
<b>12900</b>	2	Must use 10GbE/40GbE links	8	Only works within 12900 switch series.	Up to 16	Up to 1024 (2048 links maximum)
<b>12500</b>	4	Must use 10GbE/40GbE links	12	Only works within 12500 switch series.	Up to 12	240
<b>11900</b>	4	Must use 10GbE/40GbE links	8	Only works within 11900 switch series.	Up to 16 (# of ports X #LAG groups should be <2K)	Up to 2024 (2048 links maximum)
<b>10500</b>	4	Must use 10GbE/40GbE links	8	Only works within 10500 switch series.	Up to 32	256
<b>7900</b>	2	Must use 10GbE/40GbE links	8	Only works within 7900 switch series.	Up to 16	Up to 1024 (2048 links maximum)
<b>7500</b>	4 (7503, 7506) 2 (7510, 7503-S) (IRF functionality is not supported in HPE 7502 Switch Chassis)	Must use 10GbE/40GbE links	8	<ul style="list-style-type: none"> <li>Only works within 7500 switch series.</li> <li>Only switches of the same models can form an IRF.</li> <li>IRF is not supported on the 7510 if they are using HP 7500 384Gbps Fabric/Advanced Main Processing Unit (JD195A)</li> </ul>	Up to 32	128
<b>5950</b>	9	Must use 10GbE/40GbE/100GbE links	8	Only works within 5950 switch series.	Up to 32	1K
<b>5940</b>	9	Must use 10GbE/40GbE/100GbE links	8	Only works within 5940 switch series.	Up to 32	1K
<b>5930AF</b>	9	Must use 10GbE/40GbE links	8	Only works within 5930 switch series.	Up to 32	512 (eIRF systems = 1k LAGs with max 2K ports total)
<b>5920AF</b>	9	Must use 10GbE links	8 (R2311) 4 (before R2311)	Only works within 5900/5920 switch series.	Up to 16	128 (eIRF systems = 1k LAGs with max 2K ports total)
<b>5900AF</b>	9	Must use 10GbE/40GbE links	8 (R2311) 4 (before R2311)	Only works within 5900/5920 switch series.	Up to 16 or 4x40GbE	128 (eIRF systems = 1k LAGs with max 2K ports total)
<b>5830AF</b>	4	Must use 10GbE links	8 – 5830AF-96G 4 – 5830AF-48G	<ul style="list-style-type: none"> <li>IRF works with 5830AF-48G and 5830-96G switches when using code CMW520-R1115 and above.</li> <li>When using code prior to CMW520-R1115, 5830AF-48G switches can only IRF with 5830AF-48G and 5830AF-96G switches can only IRF with 5830AF-96G switches</li> </ul>	Up to 8	128

<b>5800/5820</b>	9	Must use 10GbE links	4	<ul style="list-style-type: none"> <li>Only works within 5800/5820 switch series.</li> <li>When 5800 and 5820 are mixed stacking, it is recommended to set 5820 as the Master and make sure the same software version is running on all switches.</li> </ul>	Up to 8	128
<b>5700</b>	9	Must use 10GbE/40GbE links	8 (R2311) 4 (before R2311)	Only works within 5700 switch series.	Up to 16 or 4x40GbE	128 (eIRF systems = 1k LAGs with max 2K ports total)
<b>5510 HI</b>	9	Must use 10GbE/40GbE links	1x40GbE 3x10GbE	Only works within 5510 HI switch series.	Up to 8	With IRF=128 Without IRF=24
<b>5130 HI</b>	9	Must use 10GbE links	3x10GbE	Only works within 5130 HI switch series.	Up to 8	With IRF=128 Without IRF=24
<b>5130 EI</b>	9	Must use 10GbE links	4	Only works within 5130 EI switch series.	Up to 8	With IRF=128 Without IRF=24
<b>5120 SI</b>	4	Must use GbE uplink ports	2	Only works within 5120 SI switch series.	Up to 8	26 for 48-port models 14 for 24-port models 10 for 16-port models
<b>3600 EI v2</b>	9	Must use GbE uplink ports	2	Only works within 3600 EI v2 switch series.	Up to 8	128
<b>3600 SI v2</b>	9 (16 for JG315A when using IRF lite)	Must use GbE uplink ports	2	Only works within 3600 SI v2 switch series – JG315A also supports IRF lite	Up to 8	128

## PRE-EOS/EOS PRODUCTS

Switch Series	Maximum devices in IRF domain	IRF link capacity	Max Physical Ports per IRF-Port	Notes	Number of active links per agg. group	Number of agg. groups
<b>9500</b>	4	Must use 10GbE links	8	Only works within 9500 switch series.	Up to 12	240
<b>5500 HI</b>	9	Must use 10GbE links	3	Only works within 5500 HI switch series.	Up to 8	128
<b>5500 EI</b>	9	Must use 10GbE links	2	Only works within 5500 EI switch series.	Up to 8	With IRF=128 Without IRF =26 for 48-port models or 14 for 24-port models
<b>5500 SI</b>	4	Must use 10GbE links	2	Only works within 5500 SI switch series.	Up to 8	With IRF=128 Without IRF =26 for 48-port models or 14 for 24-port models
<b>5120 EI</b>	4	Must use 10GbE links	2	Only works within 5120 EI switch series.	Up to 8GbE or 4x10GbE	26 for 48-port models 14 for 24-port models
<b>3610</b>	16	Must use GbE uplink ports	2	Only works within 3610 switch series. Supports IRF lite.	Up to 8FE or 4GbE	26 for 48-port models 14 for 24-port models
<b>3600 EI</b>	8	Must use GbE uplink ports	2	Only works within 3600 EI switch series.	Up to 8FE or 4GbE	With IRF=8 Without IRF=2
<b>3600 SI</b>	8	Must use GbE uplink ports	2	Only works within 3600 SI switch series. Supports IRF lite.	Up to 8FE or 4GbE	With IRF=8 Without IRF=2
<b>3100 EI v2</b>	16	Must use GbE uplink ports	2 – 8TP 4 – 16TP & 26TP	Only works within 3100 EI v2 switch series. Supports IRF lite.	Up to 8FE or 4GbE	4 for 8p models 9 for 16p models 13 for 24p models
<b>3100 SI v2</b>	16	Must use GbE uplink ports	2 – 8TP 4 – 16TP & 26TP	Only works within 3100 SI v2 switch series. Supports IRF lite.	Up to 8FE or 4GbE	4 for 8p models 9 for 16p models 13 for 24p models

IRF enables support for DDM, DDR, and DLA. 'IRF lite' means only DDM is supported:

**DDM (Distributed Device Management):** As seen from outside, the whole Fabric is a single equipment. It allows users to manage the Fabric through diverse modes: CONSOLE, SNMP, TELNET, WEB, etc.

**DDR (Distributed Resilient Routing):** For users, various devices of a fabric appear as a single layer 3 switch. The whole Fabric will, as single equipment, perform routing function and forwarding function between layer 2 and layer 3. Unicas routing Protocol and Multicas Routing Protocol run in distributed mode and support hot backup; when there is a fault in a certain device, routing protocols and data forwarding can continue.

**DLA (Distributed Link Aggregation):** it supports cross-device link aggregation, capable of link load balancing and mutual backup among devices.

For HPE and Channel Partner internal use only.



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