

Flowmon Probe Models List

Valid from 1.4.2020

Flowmon Probe

Flowmon Probes are high-performance appliances that monitor network traffic and generate IP flow statistics. The flow statistics are then exported to storage for further analysis by a Flowmon Collector or other NetFlow/IPFIX compatible application. The Probe provides the NetFlow/IPFIX data necessary for network operations, troubleshooting, performance, and security monitoring.

Flowmon Probe Models

Flowmon Probes are available in the form of physical (hardware) appliances of 1U rack units size and as virtual appliances for deployment into VMware, Hyper-V, and KVM virtual environments.



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Hardware Appliances

Flowmon Probes in the form of hardware appliances are high-performance stand-alone devices for monitoring all types of networks from 10 Mbps to 100 Gbps. Flowmon Probe comes in **standard** or **Pro model** with a different number and type of monitoring ports. All hardware-based Flowmon Probes provide a **built-in flow collector** and Flowmon Monitoring Center (FMC) – application for flow collection, visualization, reporting, and analysis. The built-in collector is restricted to receive flow data only from the Probe itself. It is necessary to use a stand-alone Flowmon Collector for collecting data from other/multiple sources.

All Flowmon Probes are equipped with two copper 10/100/1000 Ethernet **management** (administration) **ports** (except IFP-1000-CU with single management port only), which are used for appliance configuration, management, and flow data export. Management ports can be upgraded to 10Gb Ethernet on Probe model IFP-200000PRO-QSFP28 by upgrade package. The upgrade can be purchased only for the new appliances (at the moment of purchase).

Virtual Appliances

Flowmon Probes in the form of Virtual Appliances (VA) are network monitoring appliances designed for deployment into a **virtual environment** (VMware, Hyper-V, KVM with OpenStack). Flowmon Probe, as the virtual appliance, provides similar functionality as the physical Flowmon Probe. Flowmon Probe VA models differ in the number and speed of monitoring ports. In contrast to physical Flowmon Probe appliances, virtual Flowmon Probe **does not include a built-in collector**, so it is necessary to use a dedicated collector for NetFlow/IPFIX data storage and analysis.

All Flowmon Probe VA models support two **management** (administration) **ports** (except model IFP-1000-VA with single management port only), which are used for appliance configuration, management, and flow data export.

Flowmon IPFIX Extensions

Flowmon Probes (hardware and virtual) support **Flowmon IPFIX Extensions** which extend IPFIX information elements with monitoring of network performance statistics (Round-Trip Time, Server Response Time, delays, jitter, etc.) and application protocols like HTTP, DNS, DHCP, SMB, E-mail, MSSQL, MySQL, PostgreSQL, VoIP SIP statistics, SSL/TLS, CoAP, IEC104 and other. For more information about Flowmon IPFIX Extension, see *Flow Standards Specification* document available at <https://portal.flowmon.com>.

Supported L2 and Tunneling Protocols

Besides MAC addresses monitoring, Flowmon Probes also supports various L2 protocols and encapsulations such as VLAN, QinQ, MPLS, GRE, OTV, ESP, Avaya SPB, TRILL, and VxLAN protocols. Monitoring interfaces of 1G or 10G Probe models can be targets of ERSPAN/GRE or VxLAN monitoring sessions.

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Hardware Appliances

P/N ¹	Model	Performance per port	Monitoring Port	Flow Cache ²	RAID	Disk Type	CPU ³	RAM	Remote Control	Form Factor, Dimensions (H x W x D) cm	Weight (kg)
IFP-1000-CU	Flowmon Probe 1000	1.48 Mpps	1 x 10/100/1000 MbE	0.5 M	-	1 x SATA	8	32 GB	Express	1U, 4.3 x 43.4 x 57.3	12.2
IFP-2000-CU	Flowmon Probe 2000	1.48 Mpps	2 x 10/100/1000 MbE	0.5 M	-	1 x SATA	8	32 GB	Express	1U, 4.3 x 43.4 x 57.3	12.2
IFP-4000-CU	Flowmon Probe 4000	1.48 Mpps	4 x 10/100/1000 MbE	0.5 M	-	1 x SATA	8	32 GB	Express	1U, 4.3 x 43.4 x 57.3	12.2
IFP-4000-SFP	Flowmon Probe 4000 SFP	1.48 Mpps	4 x 1Gb Ethernet	0.5 M	-	1 x SATA	8	32 GB	Express	1U, 4.3 x 43.4 x 57.3	12.2
IFP-10000-SFP+	Flowmon Probe 10000 SFP+	1.5 Mpps	1 x 10Gb Ethernet	4 M	-	1 x SATA	8	64 GB	Express	1U, 4.3 x 43.4 x 57.3	12.2
IFP-20000-SFP+	Flowmon Probe 20000 SFP+	1.5 Mpps	2 x 10Gb Ethernet	4 M	-	1 x SATA	8	64 GB	Express	1U, 4.3 x 43.4 x 57.3	12.2
IFP-40000-SFP+	Flowmon Probe 40000 SFP+	5.0 Mpps	4 x 10Gb Ethernet	4 M	RAID1	2 x SATA	40	64 GB	Enterprise	1U, 4.3 x 43.4 x 69.3	17.5
IFP-4000PRO-CU	Flowmon Probe 4000 Pro	1.48 Mpps	4 x 10/100/1000 MbE	0.5 M	RAID1	2 x SATA	8	32 GB	Enterprise	1U, 4.3 x 43.4 x 57.3	12.2
IFP-4000PRO-SFP	Flowmon Probe 4000 Pro SFP	1.48 Mpps	4 x 1Gb Ethernet	0.5 M	RAID1	2 x SATA	8	32 GB	Enterprise	1U, 4.3 x 43.4 x 57.3	12.2
IFP-20000PRO-SFP+	Flowmon Probe 20000 Pro SFP+	14.8 Mpps	2 x 10Gb Ethernet	4 M	RAID1	2 x SATA	40	128 GB	Enterprise	1U, 4.3 x 43.4 x 69.3	17.5
IFP-40000PRO-SFP+	Flowmon Probe 40000 Pro SFP+	14.8 Mpps	4 x 10Gb Ethernet	4 M	RAID1	2 x SATA	40	128 GB	Enterprise	1U, 4.3 x 43.4 x 69.3	17.5
IFP-200000PRO-QSFP28	Flowmon Probe 200000 Pro QSFP28	100.0 Mpps ⁴	2 x 40/100Gb Ethernet	32 M	RAID1	2 x SATA	48	256 GB	Enterprise	1U, 4.3 x 43.4 x 77.3	21.9

¹ CU indicates a copper monitoring interface. Other interfaces are designed for the use of transceiver according to a monitored network.

² The number of flow entries in flow cache per each monitoring port.

³ The number of cores with Hyper-Threading.

⁴ Performance is valid for IP traffic or IP traffic encapsulated in MPLS (up to 2 layers), VLAN, QinQ. In case that other tunneling protocols are in use, performance can vary based on their combination and traffic mixture.

Express version of **remote control** includes command-line access and web GUI for remote surveillance of device conditions. **Enterprise** version of remote control additionally includes a dedicated network interface and virtual console.

Flowmon Probe **IFP-200000PRO-QSFP28** can operate in **2x 100G** or **2x 40G** modes. We recommend to use transceivers from Flowmon Accessories Price List:

- 2x 100G mode: 2x 100G-QSFP28-SR4 or 2x 100G-QSFP28-LR4 transceivers.
- 2x 40G mode: 2x 40G-QSFP-SR4 or 2x 40G-QSFP-LR4 transceivers.

All models of hardware Flowmon Probes are equipped with a built-in collector capable of processing **50 000 fps** (flows per second) and come with **500 GB storage capacity**.

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Operating Conditions

P/N	Model	PSU		Continuous Operation		Expanded Operation		Power Consumption		Heat Dissipation
		Power	Hot Swap	Temperature	Relative Humidity ¹	Temperature	Relative Humidity ¹	CPU Idle	CPU Max	
IFP-1000-CU	Flowmon Probe 1000	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	68 W	154 W	1725 BTU/h
IFP-2000-CU	Flowmon Probe 2000	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	68 W	154 W	1725 BTU/h
IFP-4000-CU	Flowmon Probe 4000	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	68 W	154 W	1725 BTU/h
IFP-4000-SFP	Flowmon Probe 4000 SFP	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	68 W	154 W	1725 BTU/h
IFP-10000-SFP+	Flowmon Probe 10000 SFP+	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	69 W	158 W	1725 BTU/h
IFP-20000-SFP+	Flowmon Probe 20000 SFP+	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	69 W	158 W	1725 BTU/h
IFP-40000-SFP+	Flowmon Probe 40000 SFP+	2x 550 W	Yes	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	153 W	300 W	2559 BTU/h
IFP-4000PRO-CU	Flowmon Probe 4000 Pro	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	79 W	165 W	1725 BTU/h
IFP-4000PRO-SFP	Flowmon Probe 4000 Pro SFP	450 W	No	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	79 W	165 W	1725 BTU/h
IFP-20000PRO-SFP+	Flowmon Probe 20000 Pro SFP+	2x 550 W	Yes	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	154 W	305 W	2559 BTU/h
IFP-40000PRO-SFP+	Flowmon Probe 40000 Pro SFP+	2x 550 W	Yes	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	154 W	305 W	2559 BTU/h
IFP-200000PRO- QSFP28	Flowmon Probe 200000 Pro QSFP28	2x 750 W	Yes	10°C+35°C	10%+80% at 29°C	5°C+40°C	5%+85% at 29°C	156 W	407 W	2891 BTU/h

¹ The specified temperature is maximum dew point temperature.

Virtual Appliances

P/N	Model	Performance per port	Monitoring Interfaces	Flow Cache ¹	VMware ESXi	Microsoft Hyper-V	KVM	Recommended Configuration
IFP-1000-VA	Flowmon Probe 1000 VA	up to 0.3 Mpps	1 x 1Gb Ethernet	0.5 M	5.5 and higher	2012 R2 and higher	KVM 3.10.0 and higher QEMU 1.5.3 and higher libvirt 4.5.0 and higher	2 CPU cores, 4 GB RAM, min. 25 GB HDD
IFP-2000-VA	Flowmon Probe 2000 VA	up to 0.3 Mpps	2 x 1Gb Ethernet	0.5 M				2 CPU cores, 4 GB RAM, min. 25 GB HDD
IFP-4000-VA	Flowmon Probe 4000 VA	up to 0.3 Mpps	4 x 1Gb Ethernet	0.5 M				2 CPU cores, 4 GB RAM, min. 25 GB HDD
IFP-6000-VA	Flowmon Probe 6000 VA	up to 0.3 Mpps	6 x 1Gb Ethernet	0.5 M				2 CPU cores, 4 GB RAM, min. 25 GB HDD
IFP-10000-VA	Flowmon Probe 10000 VA	up to 0.7 Mpps	1 x 10Gb Ethernet	4 M				4 CPU cores, 8 GB RAM, min. 25 GB HDD
IFP-20000-VA	Flowmon Probe 20000 VA	up to 0.7 Mpps	2 x 10Gb Ethernet	4 M				4 CPU cores, 8 GB RAM, min. 25 GB HDD

The performance of virtual Flowmon Probes depends on allocated resources, overall system load, and environment of deployment.

¹ A number of flow entries in flow cache per each monitoring port.