

## 4th Generation Packet Capture

High speed real-time processing of packet data



200G - 40G models

FMADIO Packet Capture appliances provide up to 200Gbps write-to-disk performance and market leading flexibility in a range of models designed to suit use-cases from simple packet capture, through to packet processing and advanced analytics:

**Lite (3000) Series** Designed for entry-level packet capture at a range of speeds, configured with API, UI or CLI for packet analysis, troubleshooting and fast PCAP retrieval.

**Pro (5000) Series** Extends the capability of the Lite series, with realtime packet processing applications, automatic realtime PCAP generation, embedded customized client logic and 3rd party applications.

**Max (7000) Series** Targeted at power-users, the Max series pushes storage and compute to the next level by maximizing the hardware throughput for the most demanding and powerful packet processing solutions.

### Key Features

- Up to 200Gbps full packet capture to disk
- Fast packet filtering and download
- Easy to use Web GUI, CLI or API
- Fully scriptable JSON API
- Pre-capture hardware filtering
- Hardware packet timestamping
- Packet slicing / truncation
- Layer 1 capture & debug
- Full capture including corrupted packets
- Download & analysis while capturing
- Filtered PCAP Push to external storage
- On appliance packet processing apps
- Full linux access to the system
- Resilient RAID storage
- Filtering using BPF (Berkeley Packet Filters)

### Use Cases

- Network Monitoring
- Network Troubleshooting
- Microburst Analysis
- Security Monitoring
- Security Forensics
- Application Analysis
- Trade Monitoring
- Trade Analytics
- Regulatory Compliance



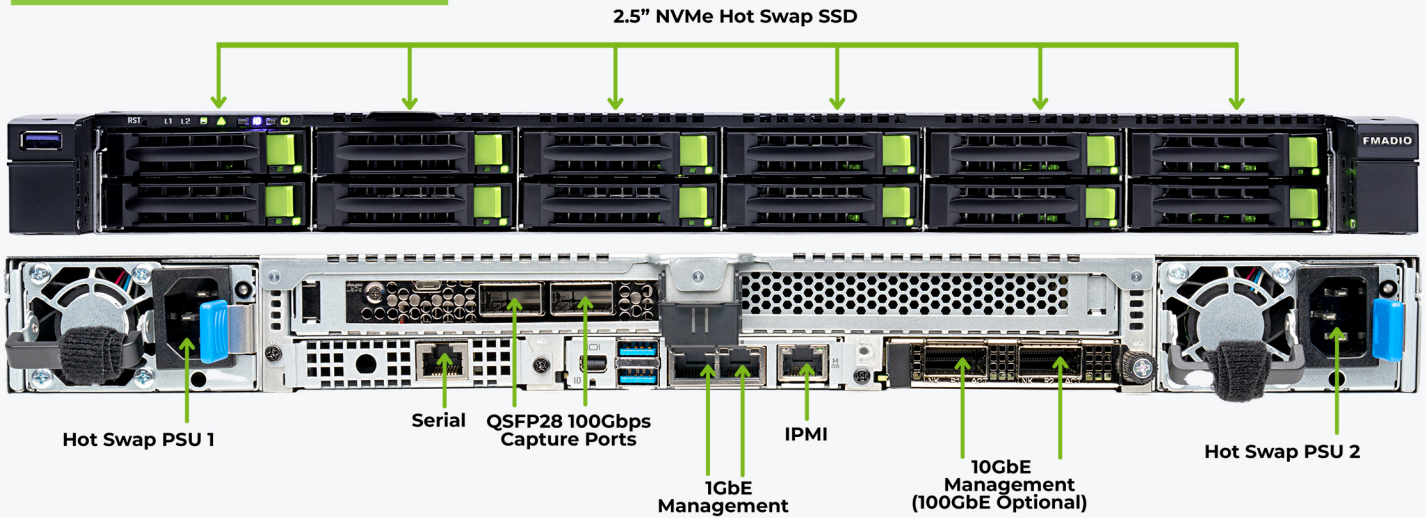
20G - 1G models

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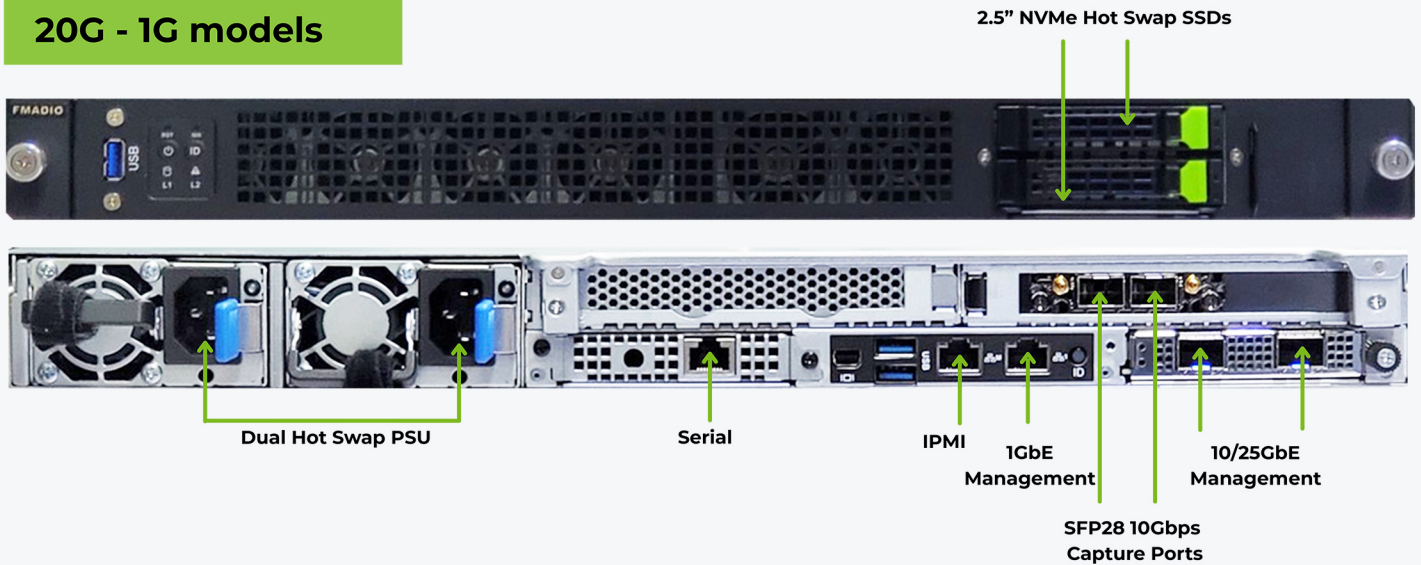
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### System Port Layouts

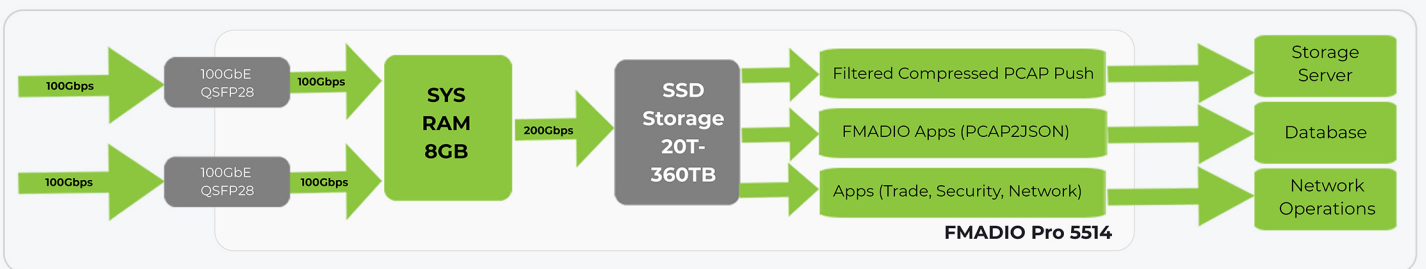
#### 200G - 40G models



#### 20G - 1G models



### Packet Flow in FMADIO appliances





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| Capture Capacity | 100G Upgrade <sup>5</sup> | 200G Upgrade <sup>5</sup> | Storage Capacity | Capture Ports | Capture Modes | Storage Mode | Rack Units | Drive Capacity <sup>6</sup> | RJ45 Man. Ports (1G) | SFP28 Man. Ports (10G/25G) | QSFP28 Man. Ports (100G) <sup>7</sup> | RJ45 Out-of-band Man. Ports | Core Count | Thread Count | RAM | PCAP Push Intraday | PCAP Push End of day | On appliance containers | Third party integrations | FMADIO Finance Apps | FMADIO Security Apps | FMADIO Telecom Apps | Layer 1 Capture buffer | Network flow monitoring | Microburst monitoring | Telemetry service | Dimensions | Weight | Power supply | SKU |
|------------------|---------------------------|---------------------------|------------------|---------------|---------------|--------------|------------|-----------------------------|----------------------|----------------------------|---------------------------------------|-----------------------------|------------|--------------|-----|--------------------|----------------------|-------------------------|--------------------------|---------------------|----------------------|---------------------|------------------------|-------------------------|-----------------------|-------------------|------------|--------|--------------|-----|
|------------------|---------------------------|---------------------------|------------------|---------------|---------------|--------------|------------|-----------------------------|----------------------|----------------------------|---------------------------------------|-----------------------------|------------|--------------|-----|--------------------|----------------------|-------------------------|--------------------------|---------------------|----------------------|---------------------|------------------------|-------------------------|-----------------------|-------------------|------------|--------|--------------|-----|

| System | Family                | Capture               |                      |     |      |                 |                                           | Hardware                       |       |    |   |   |   |   |    | Features |        |        |   |   |   |   |   |   |   | Physical                         |                                  |           | Ordering         |                  |
|--------|-----------------------|-----------------------|----------------------|-----|------|-----------------|-------------------------------------------|--------------------------------|-------|----|---|---|---|---|----|----------|--------|--------|---|---|---|---|---|---|---|----------------------------------|----------------------------------|-----------|------------------|------------------|
| 3114   | Lite                  | 20 Gbps <sup>1</sup>  |                      |     | 4T   | 2 x SFP28       | 2 x 1G <sup>8</sup><br>2 x 10G            | RAID0                          | 1U    | 2  | 1 | 2 |   | ✓ | 16 | 32       | 64 GB  | ✓      |   |   |   |   |   |   | ✓ | w: 438mm<br>d: 520 mm<br>h: 44mm | 16kg                             | 2 x 850W  | FMADIO-3114-4T   |                  |
|        |                       |                       |                      |     | 8T   |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-3114-8T   |                  |
|        |                       |                       |                      |     | 15T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-3114-15T  |                  |
|        |                       |                       |                      |     | 30T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-3114-30T  |                  |
|        |                       |                       |                      |     | 60T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-3114-60T  |                  |
| 3214   |                       | 40 Gbps <sup>2</sup>  | ✓                    | ✓   | 15T  | 2 x QSFP28      | 2 x 40G<br>2 x 25G<br>8 x 10G             | RAID5                          | 1U    | 4  | 2 | 2 |   | ✓ | 32 | 64       | 128 GB | ✓      |   |   |   |   |   |   | ✓ | ✓                                | w: 482mm<br>d: 815mm<br>h: 44mm  | 24.8kg    | 2 x 1600W        | FMADIO-3214-15T  |
|        |                       |                       |                      |     | 30T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3214-30T  |
|        |                       |                       |                      |     | 60T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3214-60T  |
|        |                       |                       |                      |     | 120T |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3214-120T |
| 3414   |                       | 100 Gbps <sup>3</sup> | N/A                  | ✓   | 20T  | 2 x QSFP28      | 2 x 100G<br>2 x 40G<br>4 x 25G<br>8 x 10G | RAID5                          | 1U    | 12 | 2 | 2 |   | ✓ | 32 | 64       | 128 GB | ✓      |   |   |   |   |   |   | ✓ | ✓                                | w: 482mm<br>d: 815mm<br>h: 44mm  | 24.8kg    | 2 x 1600W        | FMADIO-3414-20T  |
|        |                       |                       |                      |     | 45T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3414-45T  |
|        |                       |                       |                      |     | 90T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3414-90T  |
|        |                       |                       |                      |     | 180T |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3414-180T |
| 3514   |                       | 200 Gbps <sup>4</sup> | N/A                  | N/A | 360T | 2 x QSFP28      | 2 x 100G<br>2 x 40G<br>4 x 25G<br>8 x 10G | RAID5                          | 1U    | 12 | 2 | 2 |   | ✓ | 32 | 64       | 128 GB | ✓      |   |   |   |   |   |   | ✓ | ✓                                | w: 482mm<br>d: 815mm<br>h: 44mm  | 24.8kg    | 2 x 1600W        | FMADIO-3414-360T |
|        |                       |                       |                      |     | 20T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3514-20T  |
|        |                       |                       |                      |     | 45T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3514-45T  |
|        |                       |                       |                      |     | 90T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-3514-90T  |
| 5114   |                       | Pro                   | 20 Gbps <sup>1</sup> |     |      | 180T            | 2 x SFP28                                 | 2 x 1G <sup>8</sup><br>2 x 10G | RAID0 | 1U | 2 | 1 | 2 |   | ✓  | 48       | 96     | 384 GB | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓                                | w: 438mm<br>d: 520 mm<br>h: 44mm | 16kg      | 2 x 850W         | FMADIO-5114-180T |
|        |                       |                       |                      |     |      | 360T            |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-5114-360T |
|        |                       |                       |                      |     |      | 8T              |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  | FMADIO-5114-8T   |
|        | 15T                   |                       |                      |     |      | FMADIO-5114-15T |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           |                  |                  |
| 5214   | 40 Gbps <sup>2</sup>  |                       | ✓                    | ✓   | 120T | 2 x QSFP28      | 2 x 40G<br>2 x 25G<br>8 x 10G             | RAID5                          | 1U    | 4  | 2 | 2 |   | ✓ | 96 | 192      | 768 GB | ✓      | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | w: 482mm<br>d: 815mm<br>h: 44mm  | 24.8kg                           | 2 x 1600W | FMADIO-5214-120T |                  |
|        |                       |                       |                      |     | 15T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5214-15T  |                  |
|        |                       |                       |                      |     | 30T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5214-30T  |                  |
|        |                       |                       |                      |     | 60T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5214-60T  |                  |
| 5414   | 100 Gbps <sup>3</sup> |                       | N/A                  | ✓   | 20T  | 2 x QSFP28      | 2 x 100G<br>2 x 40G<br>4 x 25G<br>8 x 10G | RAID5                          | 1U    | 12 | 2 | 2 |   | ✓ | 96 | 192      | 768 GB | ✓      | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | w: 482mm<br>d: 815mm<br>h: 44mm  | 24.8kg                           | 2 x 1600W | FMADIO-5414-20T  |                  |
|        |                       |                       |                      |     | 45T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5414-45T  |                  |
|        |                       |                       |                      |     | 90T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5414-90T  |                  |
|        |                       |                       |                      |     | 180T |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5414-180T |                  |
| 5514   | 200 Gbps <sup>4</sup> |                       | N/A                  | N/A | 360T | 2 x QSFP28      | 2 x 100G<br>2 x 40G<br>4 x 25G<br>8 x 10G | RAID5                          | 1U    | 12 | 2 | 2 |   | ✓ | 96 | 192      | 768 GB | ✓      | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | w: 482mm<br>d: 815mm<br>h: 44mm  | 24.8kg                           | 2 x 1600W | FMADIO-5514-360T |                  |
|        |                       |                       |                      |     | 45T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5514-45T  |                  |
|        |                       |                       |                      |     | 90T  |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5514-90T  |                  |
|        |                       |                       |                      |     | 180T |                 |                                           |                                |       |    |   |   |   |   |    |          |        |        |   |   |   |   |   |   |   |                                  |                                  |           | FMADIO-5514-180T |                  |

<sup>1</sup> 20Gbps – 29.76Mpps @ 64B-9218B packet size.

<sup>2</sup> 40Gbps – 59Mpps @ 64B-9218B packet size.

<sup>3</sup> 100Gbps – 149Mpps @ 64B-9218B packet size.

<sup>4</sup> 200Gbps – 297.6Mpps @ 64B-9218B packet size.

<sup>5</sup> Upgradable based on new licence key and disk pack.

<sup>6</sup> NVMe SSD Drives. Not all systems will have all drive bays populated.

<sup>7</sup> QSFP Man. Ports: 2 x 100G, 8x10G, 4x25G possible via breakout (40G not supported). Optional SFP28 management ports.

<sup>8</sup> 10M/100M/1G Copper only.