

Product Description

Aster A-XFE is Microtel Innovation top performing appliance for mobile user & control plane **Advanced Packet Brokering, powered by a double Network Processor fabric, supporting up to 20X100Gb/s ports.**

Combined with the powerful Streamliner Suite applications, A-XFE works as a **powerfull Advanced Packet Broker with GTP balancing and filtering** functionalities, also providing **Advanced Packet Manipulation capabilities.**

It allows for top performances, with **20X100Gb/s input/output ports, and 200Gb/s total GTP traffic** to be correlated and filtered.

The Streamliner Suite

The Streamliner Suite includes the following applications:

- **L2-L4 Network Packet Broker**, with 20X100Gb/s input/output ports;
- **Advanced Packet Manipulations (APM)**, to streamline the monitoring tools;
- **GTP Load Balancer**, which identifies and correlates the subscriber traffic flows inside the GTP pipe and forward them to the monitoring tools in a coherent way;
- **GTP Advanced Load Adapter**, implementing session based **L5-L7 filtering functionalities**, and providing **sampling capabilities.**

Licensing scheme

- **Easy to order:** all the Streamliner Suite Applications can work in the same platform and are included in the A-XFE bundle.
- **Seamless transition to 40G and 100G visibility**, as the network growths. A-XFE in/out port license is related to the cage interface:
 - * To upgrade a 10G link with a 40G one: nothing to buy, since license and transceiver remain the same;
 - * To replace a 10G link with a 100G one: only the transceiver has to be replaced, being the cage license still valid.

Aster A-XFE Streamliner



Streamliner Suite Applications

- **L2-L4 Network Packet Broker**, with 20X100Gb/s interface, each one to be used as 100Gb, 40Gb/s or 4X10Gb/s ports, any mixed configuration is possible
- **Advanced Packet Manipulation (APM)**, which can smartly reduce the traffic towards the monitoring tools: Deduplication, Header Stripping, Source Port Labeling and Packet Slicing
- **GTP Load Balancer**, capable to balance the GTP traffic load across multiple probes in a coherent way, i.e. granting that the whole subscriber session is sent to the same tool
- **GTP Advanced Load Adapter**, implementing powerful session based GTP traffic filtering and sampling, with the goal to significantly reduce the probe workload. Several parameters can be used as filtering criteria, between them IMSI, APN, IMEI, RAT, ULI, QCI
- **Easy to order**, all ports enabled, no additional licences needed

Aster A-XFE Streamliner GTP Load Adapter – Ordering Information

| | Aster A-XFE Bundles |
|------------------------|--|
| A-XFE-FL-20C | GTP Load Balancer: 1RU Chassis, fully licenced, 20 x 40/100 G in/out ports licensed. (QSFP+/QSFP28 not included). Includes Advanced Load Adapter Application licence up to 200Gb/s and Advanced Packet Manipulation licence. AC Redundant Power Supply |
| A-XFE-FL-20C/DC | GTP Load Balancer: 2RU Chassis, fully licenced, 20 x 40/100 G in/out ports licensed. (QSFP+/QSFP28 not included). Includes Advanced Load Adapter Application licence up to 200Gb/s and Advanced Packet Manipulation licence. DC Redundant Power Supply |
| | Transceivers |
| QSFP+-SR/M-4 | 40G Parallel Fiber - Multi-Mode (850nm) with MPO/MTP connector; when used as 4X10G, it requires MPO/MTP connector to 8 x LC connectors adapter or breakout cable. |
| QSFP+-LR/M-4 | 40G Parallel Fiber - Single-Mode (1310nm) with MPO/MTP connector; when used as 4X10G, it requires MPO/MTP connector to 8 x LC connectors adapter or breakout cable. |
| QSFP28-SR/M-4 | 100G Parallel Fiber - Multi-Mode (850nm) with MPO/MTP. |
| QSFP28-PSM4/M-4 | 100G Parallel Fiber - Single-Mode (1310nm) with MPO/MTP. |
| QSFP28-LR4/L | 100G LAN-WDM Single-Mode (1310nm) with LC connector. |
| | Cabling |
| CMM-11-3-MM-2m | MTP/MPO Patch Cable Multi-Mode OM3, 12-Core MTP (Female) to MTP (Female), Type B Polarity, 2m length |
| CMM-11-3-MM-5m | MTP/MPO Patch Cable Multi-Mode OM3, 12-Core MTP (Female) to MTP (Female), Type B Polarity, 5m length |
| CMM-11-4-MM-2m | MTP/MPO Patch Cable Multi-Mode OM4, 12-Core MTP (Female) to MTP (Female), Type B Polarity, 2m length |
| CMM-11-4-MM-5m | MTP/MPO Patch Cable Multi-Mode OM4, 12-Core MTP (Female) to MTP (Female), Type B Polarity, 5m length |
| CMM-11-SM-2m | MTP/MPO Patch Cable Single Mode OS2, 12-Core MTP (Female) to MTP (Female), Type B Polarity, 2m length |
| CMM-11-SM-5m | MTP/MPO Patch Cable Single Mode OS2, 12-Core MTP (Female) to MTP (Female), Type B Polarity, 5m length |
| CML-14-3-MM-2m | Breakout cable MTP/MPO connector (Female) to LC connectors 4 x 10G (Male), Multi-Mode 850nm, OM3, 50/125 um, 2m length |
| CML-14-4-MM-2m | Breakout cable 1 x 40G (MPO/MTP connector) to 4 x 10G (8 x LC connectors), OM4, Multi-Mode (850 nm) 50/125 um; 2m length |
| CML-14-SM-2m | Breakout cable MTP/MPO connector (Female) to LC connectors 4 x 10G (Male), Multi-Mode 850nm, OM4, 50/125 um, 2m length |

Aster A-XFE Streamliner GTP Load Adapter – Technical Specifications

| Input/Output Capabilities | |
|------------------------------|--|
| Input/Output ports | 20x100Gb/s cages. Each cage can be used as 4X10G, 1X40G or 1X100G input/output ports. |
| Performances | Manage 200Gb/s total traffic and up to 10 Million users in 1U space |
| Management | |
| Management port | 1 x 10/100/1000Mb/s with RJ45 connector, 1 x Serial Console Port |
| Protocols | IPV4, IPV6, SNMPv2, TACACS+, LDAP, Radius, HTTPS, |
| Statistics and Alarms | Real time statistics and counters for each input/output port, SNMP alarms |

| Operating | Power | Dimensions | Regulatory |
|---|---|---|--|
| <ul style="list-style-type: none"> Operating temperature: 5°C to 40°C - Humidity: 10% to 85% (non-condensing) Storage temperature: 0°C to 70°C - Humidity: 5% to 95% (non-condensing) | <ul style="list-style-type: none"> Dual redundant power supply 100-240 Vac ; -48 Vdc Field serviceable Max power consumption: 1200 W (fully equipped) | <ul style="list-style-type: none"> Chassis 1U surface or 19" rack mount, 482 mm W, 600 mm D, 44 mm H Weight: (fully equipped): 12 kg (26.5 lbs) | <ul style="list-style-type: none"> CE Mark Safety: UL/EN/IEC 60950-1, CSA 22.2 EMC: FCC Part 15, Class A, EN 55022; Immunity: EN 300 386, EN55024, EN 61000-3-2, EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-5, EN 61000-4-6, EN61000-4-8, EN61000-4-11 |

NETWORK PACKET BROKER

STREAMLINER

ASTER

ETHERNIZER

COPPER TAP

XGB

VIRTUAL TAP

OPTICAL TAP

GTP LOAD ADAPTER

GTP BALANCER

Microtel
innovation