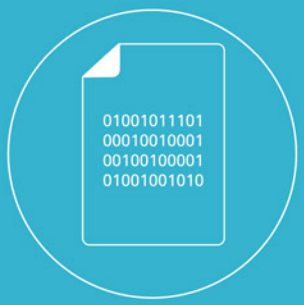
CUBRO
NETWORK VISIBILITY



EX48800

DATA SHEET

Published at Cubro, June 2025

Please refer to the latest version of this document on our website
to ensure you have the most up-to-date information.

Advanced Network Packet Broker
At a glance

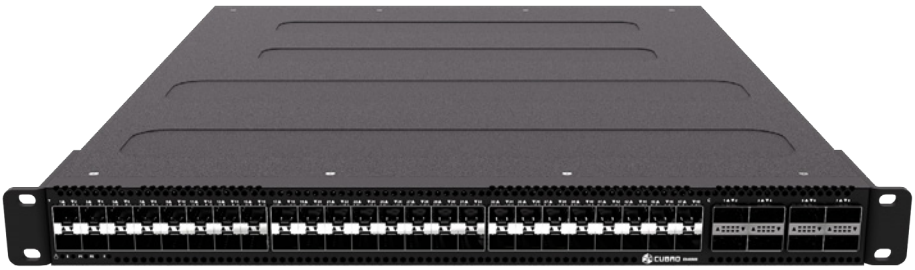
Definition

An Advanced Network Packet Broker is a switch-like device purpose-built to receive traffic from a variety of network sources (live link, TAPs, SPANs, mirror ports) and to filter, duplicate, and/or aggregate that traffic to monitoring and security tools.

Advantages of EX48800

- Filters and load-balances traffic from 1, 10, 25, 40 or 100 Gbps links to multiple monitoring tools
- Aggregates multiple inputs with different interface speeds to one or more output ports / monitoring tools
- 48 x 10/25 Gbps (SFP+/SFP28) and 8 x 40/100 Gbps (QSFP/QSFP28) ports
- 40/100 Gbps ports support break-out to 4 x 10/25 Gbps
- IPv6 support
- Tunnel removal and inside tunnel filtering
- Flexible port licensing model (12, 24, 36 or 48 ports enabled)
- Open for 3rd party transceivers
- 2-year base warranty period

Product Overview



The Packetmaster EX48800 is a high-performance network packet broker that aggregates, filters, replicates, and load balances network traffic to monitoring, security, and management tools. Built on an advanced multi-core, industry-leading programmable switch chip, it ensures high-speed processing. The EX48800 delivers hardware-level filtering for unparalleled throughput and performance. With multilayer filtering and advanced tunnel removal, it is the perfect choice for overlay network visibility applications.

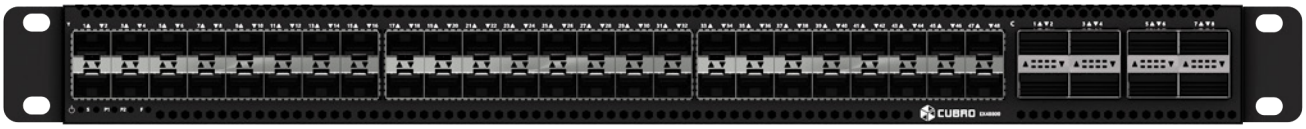
Functions / Benefits:

- Easy to configure: Secure Web GUI / ReST API
- Load balancing: Hash-based, session aware load balancing on either outer or inner tunnel headers
- Ultra high port density: Supports up to 8 x 40/100 Gbps or 32 x 25/10 Gbps ports and 48 dedicated SFP+/ SFP28 ports for 10G or 25 Gbps
- Supports 4 x 1 Gbps ports
- Tunnel termination and filtering on multiple parameters including inner tunnel (VXLAN, GTP, ERSPAN, MPLS, etc)
- ASCII string filtering inside the payload
- SNMPv2c and SNMPv3 support
- Straight and easy development of filtering strings using MS Excel with download function.

Product Capabilities / Features

Number of Ports	44 x SFP+/SFP28 for 10/25 Gbps; 4 x SFP/SFP+/SFP28 for 1/10/25 Gbps; 8 x QSFP/QSFP28 for 40/100 Gbps - these ports can be used in break-out mode to support 4 x 10/25 Gbps
Link/Port Aggregation	1:1; 1:n; n:1; n:n - at all port/link speeds
Jumbo Frame Support	The packet broker supports jumbo Ethernet frames with a size of up to 9192 bytes.
Traffic distribution/load balancing	Traffic can be easily distributed to single ports, parallel ports or load-balancing groups
Tunnel termination and inner tunnel filtering	MPLS, MPLS over UDP, GRE, GTP, ERSPAN, VXLAN
Throughput / Latency	Non-blocking architecture with 4000 Gbps throughput
Packet Buffer	22 MB
Supervision / Logging	SNMPv2c and SNMPv3; Syslog and Activity Log function
Unit Control	WebUI via https and RestAPI via 10/100/1000B-T management interface
MTBF	200.742 hours
Electrical Power	Dual 100-240 V AC or 36-72 V DC available
Cubro Vitrum Support	Yes

Technical Data / Specifications



Ports*

- 4 x 1 Gbps / 10 Gbps / 25 Gbps full duplex ports for any kind of SFP/SFP+/SFP28
- 44 x 10 Gbps / 25 Gbps full duplex ports for any kind of SFP+/SFP28
- 8 x 40 Gbps / 100 Gbps full duplex ports for any kind of QSFP/QSFP28
- *Each port can be input and / or output depending on the application and configuration
- *All QSFP/ QSFP28 ports support breakout cables to 4 x 10G or 4 x 25G interfaces

Performance

- Performance up to 4000 Gbps
- Non-blocking design
- Boot time from power on to working 180 sec

Management

- Management Port: (1) RJ45 10/100/1000 Mbit Configuration

Operating specifications:

- Operating Temperature: 0ºC to 40ºC
- Storage Temperature: -10ºC to 70ºC
- Relative Humidity: 10% min, 95% max (non-condensing)

Mechanical specifications:

- Dimension (WxDxH): 444 x 538 x 44 mm
- Weight: 10,8 kg
- Airflow: Front-back

Electrical specifications:

- Input Power: 100-240 V AC or 36-72 V DC
- Maximum Power Consumption: 540W
- Power Supply Module: 2 (redundant & hot- swappable)

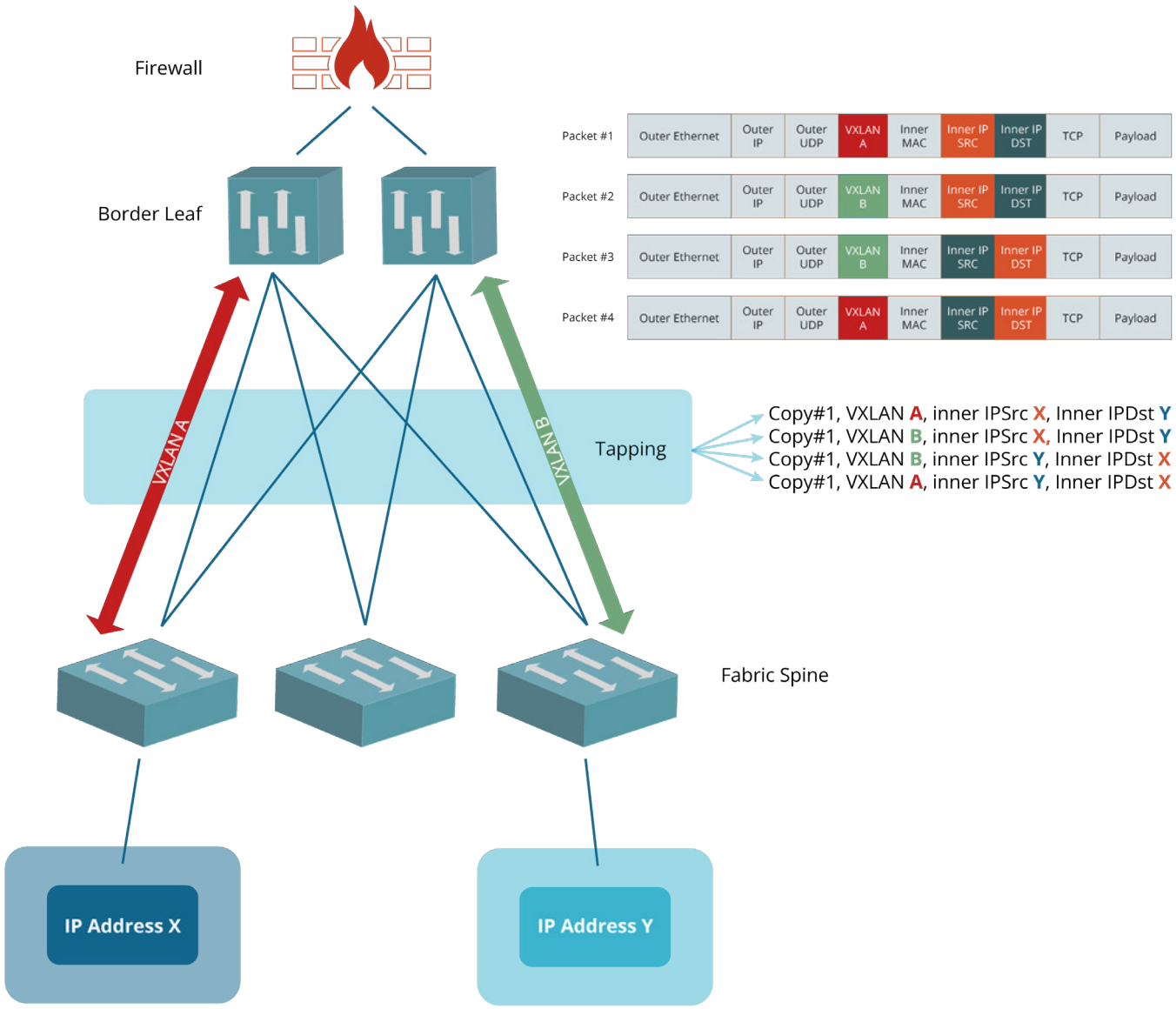
Certifications:

- Compliance and Safety: EN 61000-3-2:2019; EN 61000-3-3:2013/A1:2019; EN 62368-1:2014; EN 55035/2017/A11:2020
- EN 55032:2015/A1:2020
- EU Directives compliance: 2014/35/EU and 2014/30/EU RoHs Compliance: RoHS 6

Applications and Solutions

Deduplication by filtering in VXLAN overlay networks (VXLAN VNI and IP filtering)

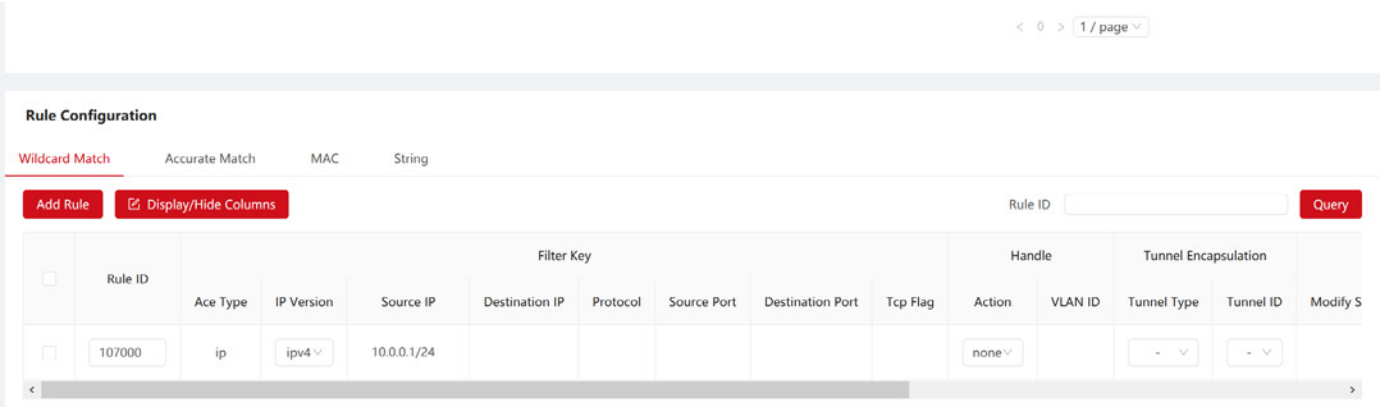
Usually, duplicate traffic is caused by capturing the same traffic multiple times due to multiple tapping and/or aggregation devices.



Traffic between IP X and IP Y passes through the tap twice, causing the same packets to appear twice at the tap output. From the user's perspective, each packet is received twice.

The EX48800 offers an easy and straightforward way to eliminate these duplicates by allowing filtering of both the VXLAN VNI and inner IP simultaneously.

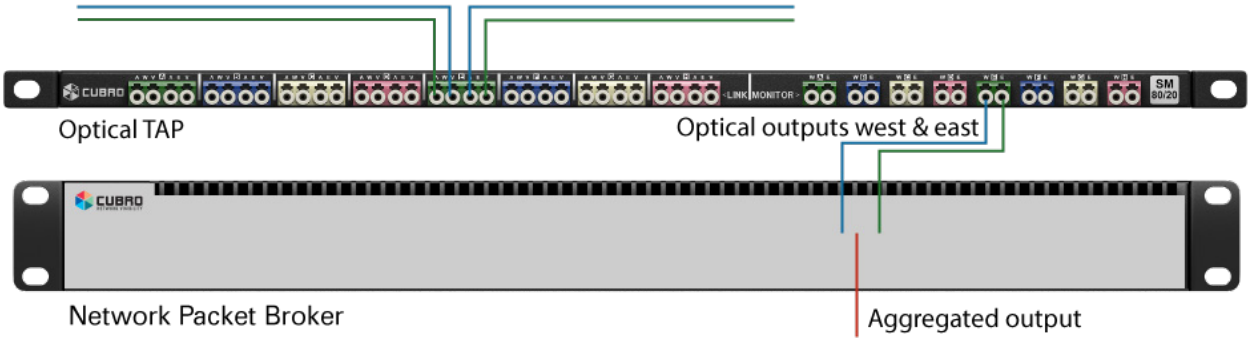
VXLAN VNI and inner IP filtering:



Aggregation

The EX48800 is able to receive traffic from a single or multiple 1/10/25/40 or 100 Gbps link(s) via the monitoring ports of an inline tapping device. The incoming traffic can be further aggregated to a single or multiple outputs to connect analyzers and monitoring tools as required.

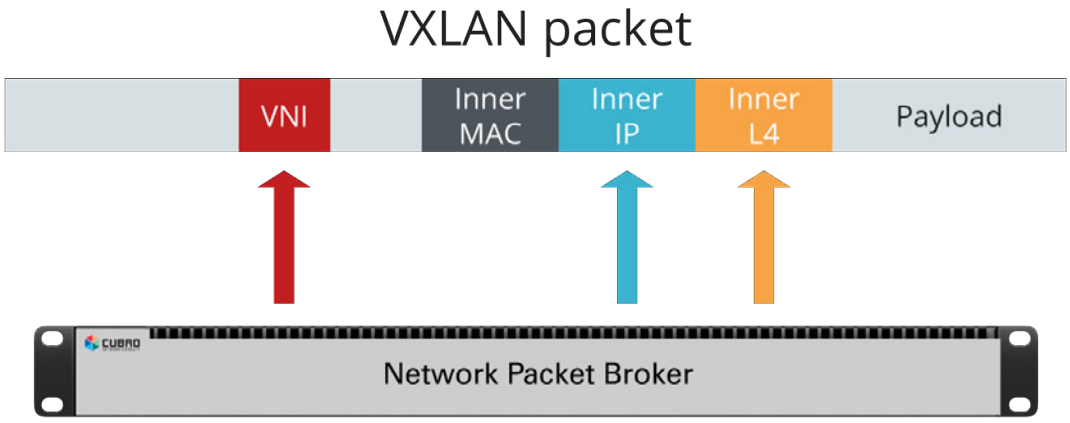
The example below shows how the EX48800 aggregates upstream and downstream traffic of a 100 Gbit link to a single output port for more economical usage of connected traffic probes/ analytics systems.



State-of-the-art tunnel functionality

The EX48800 supports the termination of various tunnels such as:

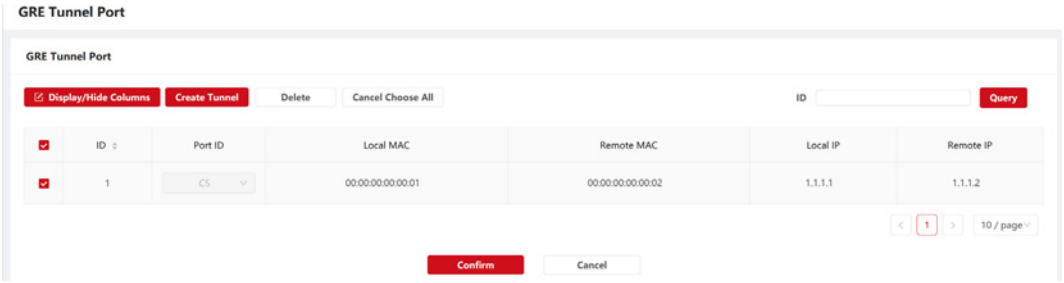
- ERSPAN II and III
- GRE
- GTP
- MPLS over UDP
- VXLAN

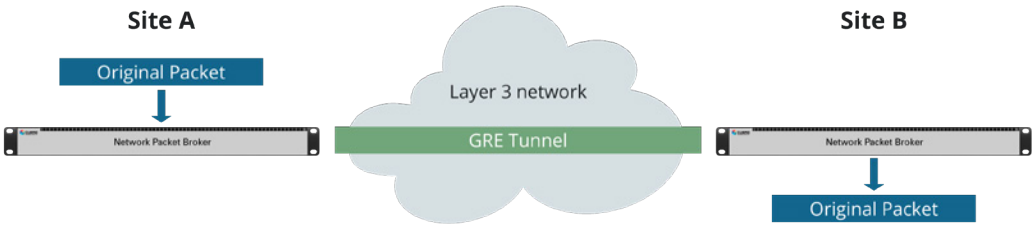


Every port of the EX48800 supports an independent MAC and IP setup. Thus, the EX48800 can be used as an active tunnel end-point. Besides tunnel termination, it also allows filtering inside tunnels. This superior functionality makes the EX48800 perfectly suited for any modern overlay network.

GRE Encapsulation Function

To transport filtered packets from site A to site B over a routed Layer 3 network, the EX48800 supports a GRE encapsulation function.

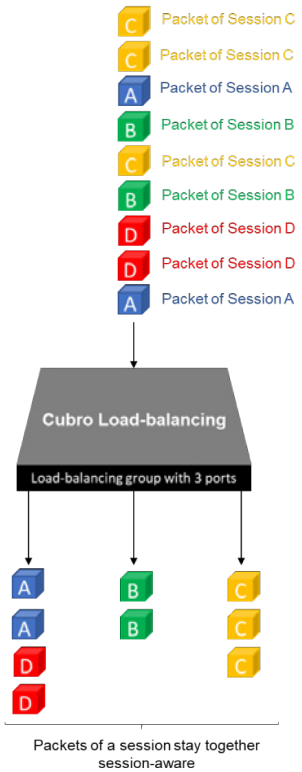




Session-aware load-balancing

Load-balancing is a vital function to distribute traffic across different monitoring tools evenly and correctly. The Cubro EX48800 supports Session-Aware Load balancing that allows every packet belonging to the same conversation/flow to be sent to the same physical output port within a load-balancing group. This ensures that connected packet sniffer or other monitoring tools get every packet of a given conversation. The EX48800 maintains the association of packets with each flow or conversation between any two network endpoints such that all traffic from a given flow will be output from a consistent monitor port within a load balanced group.

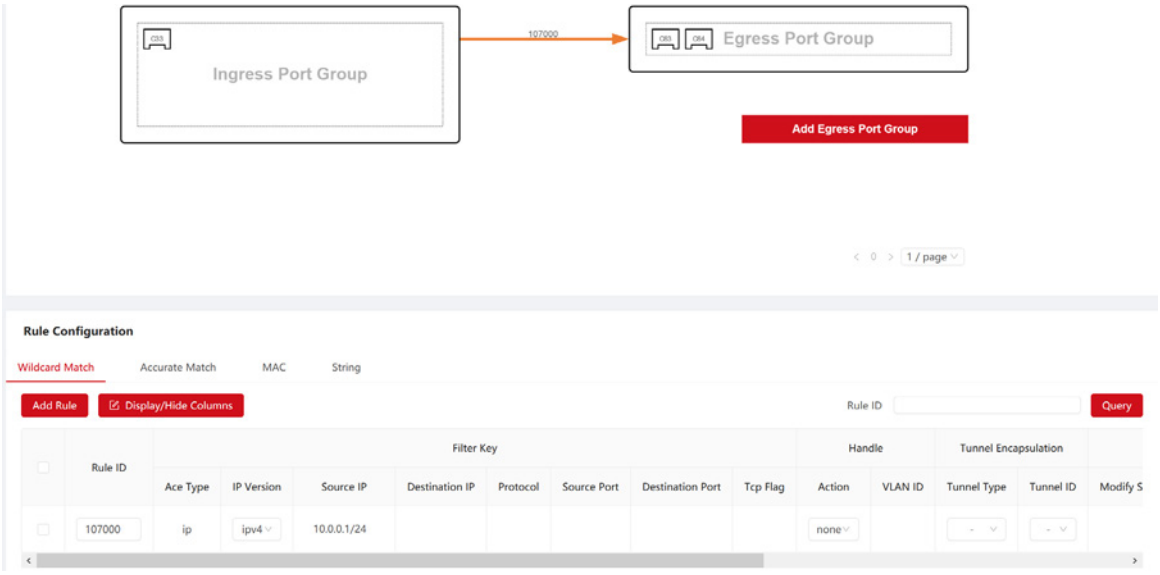
Flow association is done by examining selected fields within each packet and performing a mathematical algorithm called hash key calculation. The result of the calculation is used to consistently separate and distribute traffic to specific ports within a load balanced group. Depending on the requirements, the EX48800 allows different hash key calculations methods ensuring that packets always arrive at the correct interface of the monitoring appliance.



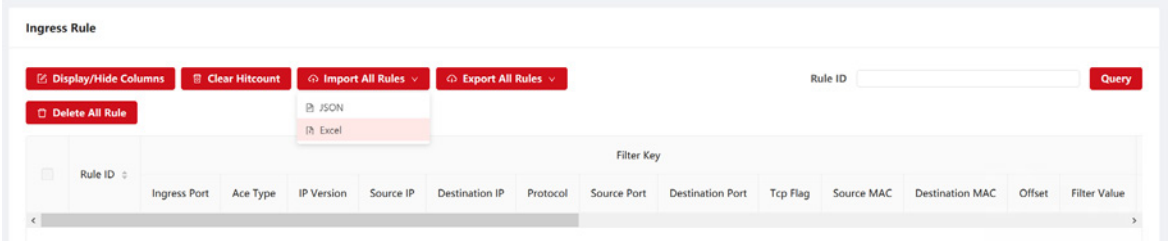
Easy Operation with low learning curve

The EX48800 features an extremely easy to use graphical way of operation.

The innovative and logical WebUI allows the user to create a backup, setup new users, check port link status/statistics or define a powerful filtering scenario which helps to do the job quickly.



Filters can also be created using Microsoft® Excel and uploaded to the EX48800.



Ordering Information

Product Components:

- Cubro EX48800
- AC/DC power supply
- European power cord
- Transceivers not included

Part Number	Description
CUB.PM-EX48800-12	Packetmaster EX48800, 12x25G and 8x40G/100G, AC powered
CUB.PM-EX48800-24	Packetmaster EX48800, 24x25G and 8x40G/100G, AC powered
CUB.PM-EX48800-36	Packetmaster EX48800, 36x25G and 8x40G/100G, AC powered
CUB.PM-EX48800-48	Packetmaster EX48800, 48x25G and 8x40G/100G, AC powered
CUB.PM-EX48800-12-DC	Packetmaster EX48800, 12x25G and 8x40G/100G, DC powered
CUB.PM-EX48800-24-DC	Packetmaster EX48800, 24x25G and 8x40G/100G, DC powered
CUB.PM-EX48800-36-DC	Packetmaster EX48800, 36x25G and 8x40G/100G, DC powered
CUB.PM-EX48800-48-DC	Packetmaster EX48800, 48x25G and 8x40G/100G, DC powered
CUB.PM-EX48800-12U	Packetmaster EX48800 12x25G Port Upgrade

Spare parts:

Part Number	Description
CUB.PM-AC-G	AC Power supply module for CUBRO EX48800/EXA48800
CUB.PM-DC-G	DC Power supply module for CUBRO EX48800/EXA48800

For more information please check our website www.cubro.com.