

# SmartNA DE-Dupe

Packet Broker with De-Duplication Engine

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## DATA SHEET



## Comprehensive Overview

The Network Critical De-Dupe Packet Broker is a highly effective traffic optimization tool designed to address redundant packet traffic, a common challenge in modern networks. By eliminating duplicate packets in real time, it optimizes bandwidth, improves the accuracy of monitoring tools, and reduces system workload. Its flexible and scalable design ensures seamless integration across a range of network environments, making it an essential addition to any infrastructure.



## Built for High-Performance Environments

SmartNA-De-Dupe is engineered for demanding, high-throughput networks. The solution operates at full line rate without the need for external co-processors, making it suitable for latency-sensitive and mission-critical environments.

The platform supports complex traffic conditions, including multi-VLAN environments and fragmented packets, while maintaining consistent performance and accuracy. By removing duplicates at the network layer, SmartNA-De-Dupe ensures that downstream tools receive clean, optimised traffic without introducing delays or bottlenecks.

KEY FEATURES	BENEFITS
Real-time Deduplication	Optimizes traffic and data delivery at full line speed
Embedded ARM based 64-bit hardware acceleration	Deduplicate up to 25Gbps at 256B average packet size
48GB DDR5 Hash Memory	16M Packet Window up to 9K Jumbo frames
Tunable deduplication window	From 5-500ms. Optimized window size of 10ms eliminates unnecessarily stale hash buffers
6 duplicate detection templates	Include Layers 2, 3, 4, TCP headers only or Full Packet including payload
Full Packet Broker Capabilities	Aggregation, Filtering, Load Balancing on 8x25G ports with 50Gbps deduplication bandwidth
Intelligent and intuitive Drag-n-Vu™ user interface for fast, error free configuration, deployment and management	Single pane-of-management portal for the SmartNA-De-Dupe™ system.
Programmable architecture purpose-built to support workload density, emerging protocols and new technologies	Future-proofing the visibility solution
Granular Customization	Allows precise, rule-based control over packet elimination

KEY FEATURES	BENEFITS
Session Aware Load Balancing by IP address, protocol, port, VLAN, MAC address or other parameters.	Leveraging Inline tools, enabling maximum network performance
SNMPv3 integrates with all major NMSs	Enabling greater tool management
Custom P-Tag functionality enables complex traffic processing workflows	Pinpoint tool optimization

## HARDWARE SPECIFICATIONS

	25GbE	8 x 25GbE SFP28 PORTS
NETWORKING	10GbE	1 x 10GbE SFP+
	1GbE	or 1GbE SFP
I/O INTERFACES	Console	RJ45
	USB	2 USB 3.0 Type-A
	LED Indicator	LED 1x4
	Management port	1x 1GbE/100MbE RJ45
	Expansion	1x PCIe Edge x8 1x FPGA (Optional)
POWER SUPPLY	Power Type	AC
	Watts	100W
	Inputs	100-240V
ENVIRONMENT	Temperature	0°C to 45°C
	Operating Humidity	5% to 90% (non-condensing)
COOLING	FAN	2, site-to-site
DIMENSION		205mm(W)x330mm(D)x44mm(H)

## Chassis Options

New SmartNA-DE-Dupe	
6110	SmartNA-De-Dupe Chassis (8) 25GbE SFP28
6120	SmartNA-De-Dupe Chassis (16) 25GbE SFP28

For more information about the SmartNA-De-Dupe™ system, please visit [www.networkcritical.com](http://www.networkcritical.com)  
 For quotes and inquiries, please contact [sales@networkcritical.com](mailto:sales@networkcritical.com)