The D-Link Difference

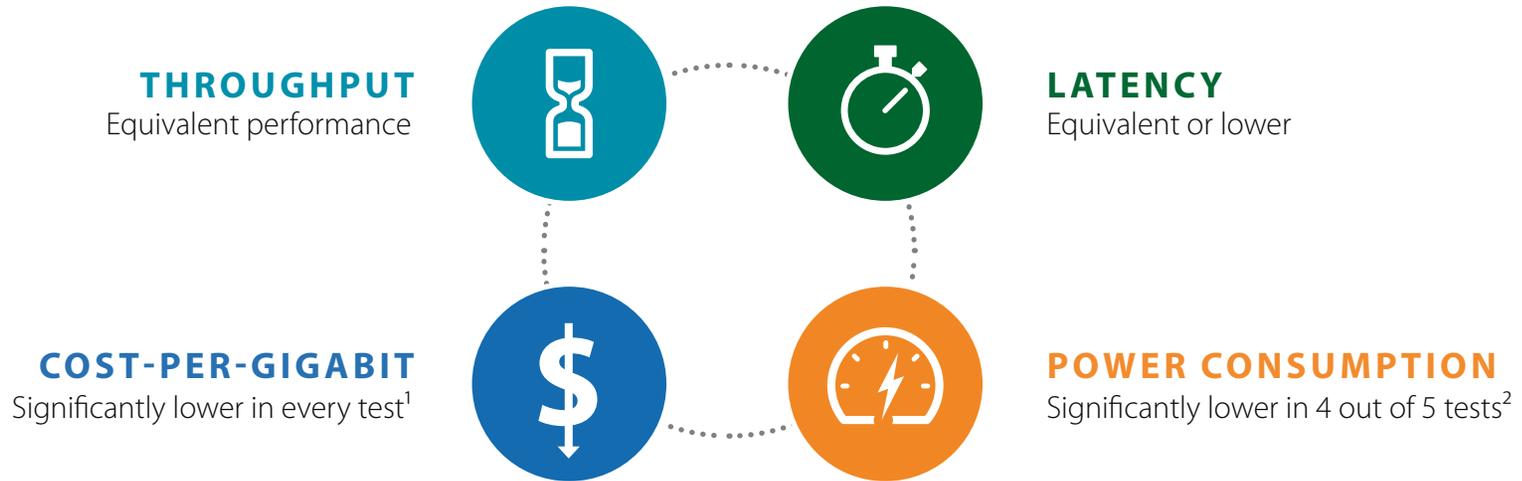Tolly-tested so you can switch with confidence

D-Link®

WE PUT OUR SWITCHES UP AGAINST THE BEST IN THE BUSINESS —AND CAME OUT ON TOP

If you're evaluating managed switches for your IT network, it pays to have proof-of-performance you can trust. When D-Link commissioned independent test lab The Tolly Group to test its managed switches against comparable switches from Cisco Systems, Hewlett Packard Enterprise (HPE), and NETGEAR, D-Link's switches matched or exceeded the competition in performance and value.

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The D-Link Bottom Line Results for All Tests

THROUGHPUT
Equivalent performance

LATENCY
Equivalent or lower

COST-PER-GIGABIT
Significantly lower in every test[1]

POWER CONSUMPTION
Significantly lower in 4 out of 5 tests[2]

D-LINK DGS-1510-28X VS. **CISCO SG500X-24**

62% LOWER
cost-per-gigabit
vs. Cisco

51% LOWER
power consumption
vs. Cisco
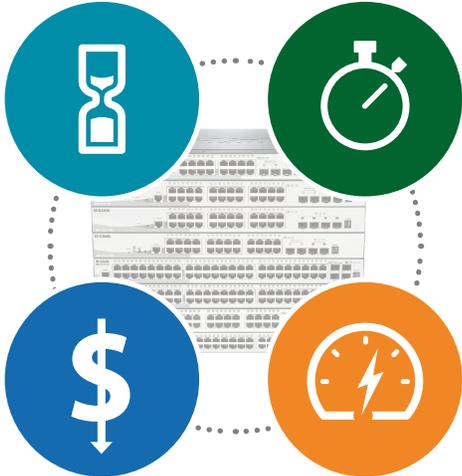
D-LINK DGS-3630-28TC VS. **CISCO CATALYST 3650-24TD-E**

56% LOWER
cost-per-gigabit
vs. Cisco

38% LOWER
power consumption
vs. Cisco

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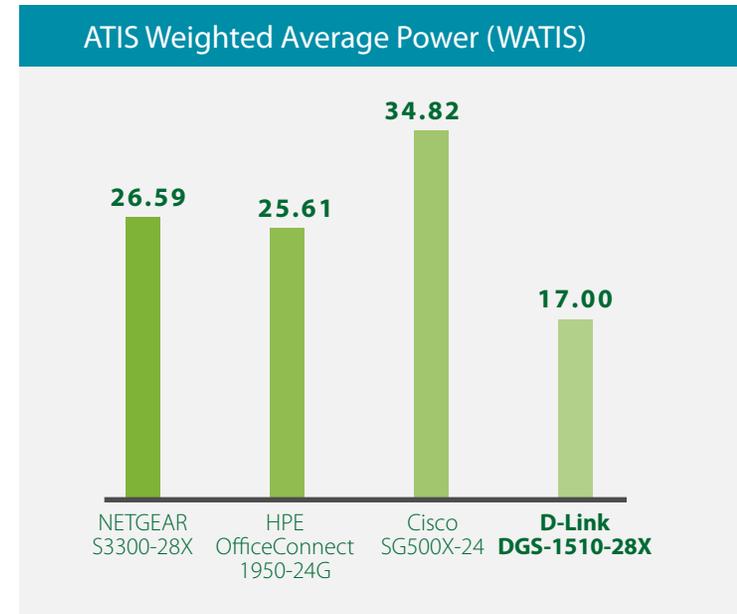# D-Link DGS-1510 vs. Cisco SG500X, HPE OfficeConnect 1950, and NETGEAR S3300

THROUGHPUT
Line-rate L2 throughput equivalent to all competing switches

LATENCY
L2 and L3 latency comparable to HPE and NETGEAR

COST-PER-GIGABIT
Up to 62% lower

POWER CONSUMPTION
Up to 51% improvement

The D-Link DGS-1510 Stackable series is designed to meet the needs of businesses looking for scalability, including the ability to stack switches and manage them from a single location.

ATIS Weighted Average Power (WATIS)

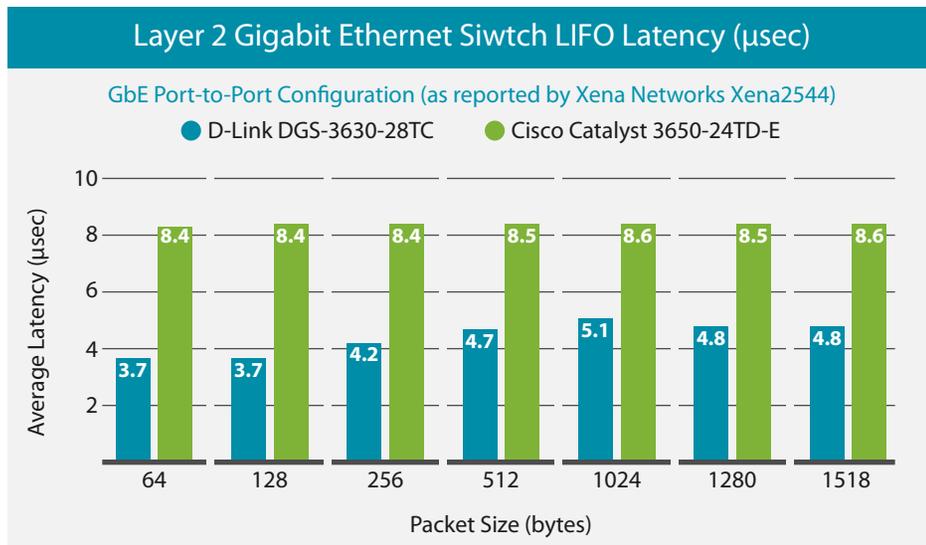| NETGEAR S3300-28X	HPE OfficeConnect 1950-24G	Cisco SG500X-24	D-Link DGS-1510-28X
26.59	25.61	34.82	17.00

Power Consumption Percentage Improvement of D-Link vs. Competitors

A 51% improvement over Cisco

A 34% improvement over HPE

A 36% improvement over Netgear

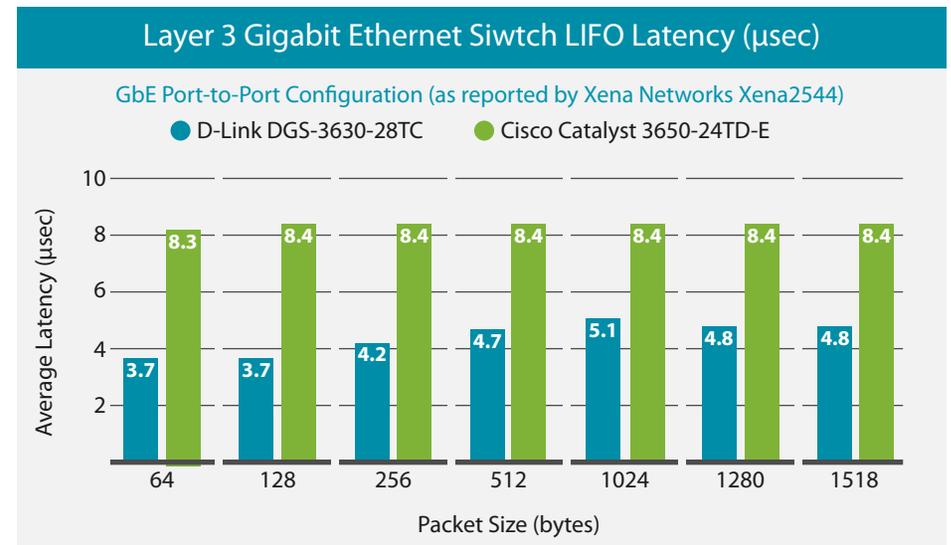**D-Link** ®

D-Link DGS-3630-28TC vs. Cisco Catalyst 3650-24TD-E

THROUGHPUT
Line-rate across all GbE and
10GbE ports equivalent to Cisco

LATENCY
L2 and L3 latency better
across all packet sizes tested

COST-PER-GIGABIT
38% lower

POWER CONSUMPTION
56% lower

The fully managed DGS-3630-28TC Gigabit Ethernet L3 Stackable switch supports a full suite of Layer2, Layer2+ and Layer3 switching functionality and offers 10/100/1000 ports with 10GbE (SFP+) ports for stacking/uplinks. Dynamic Routing is supported with an Enhanced Software Image upgrade. PoE and non-PoE models are available.

Layer 2 Gigabit Ethernet Siwtch LIFO Latency (μsec)

GbE Port-to-Port Configuration (as reported by Xena Networks Xena2544)

● D-Link DGS-3630-28TC   ● Cisco Catalyst 3650-24TD-E

Packet Size (bytes)	D-Link	Cisco
64	3.7	8.4
128	3.7	8.4
256	4.2	8.4
512	4.7	8.5
1024	5.1	8.6
1280	4.8	8.5
1518	4.8	8.6

Average Latency (μsec) — Packet Size (bytes)

Layer 3 Gigabit Ethernet Siwtch LIFO Latency (μsec)

GbE Port-to-Port Configuration (as reported by Xena Networks Xena2544)

● D-Link DGS-3630-28TC   ● Cisco Catalyst 3650-24TD-E

Packet Size (bytes)	D-Link	Cisco
64	3.7	8.3
128	3.7	8.4
256	4.2	8.4
512	4.7	8.4
1024	5.1	8.4
1280	4.8	8.4
1518	4.8	8.4

Average Latency (μsec) — Packet Size (bytes)

Note: Result is average of port 1 to port 2 and port 2 to port 1. Results do not include time required to store frame/packet.
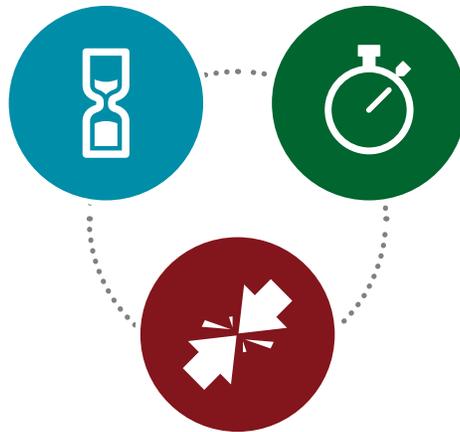
Source: Tolly, March 2017

See the complete test results.

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D-Link DXS-3400-24TC vs. NETGEAR M4300-24X

THROUGHPUT
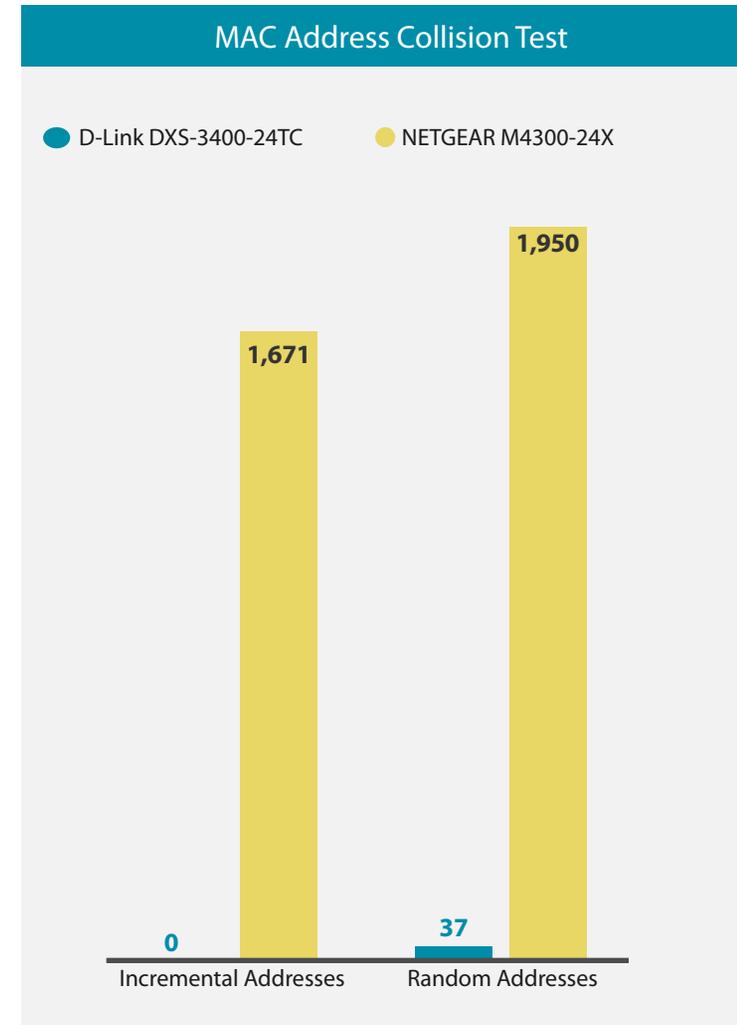Line-rate L2 throughput across all 10GbE ports equivalent to NETGEAR

LATENCY
Identical to NETGEAR

MAC ADDRESS COLLISION RATES
98% to 100% better than NETGEAR

The fully managed D-Link DXS-3400-24TC 10Gigabit Ethernet Lite L3 Stackable Switch supports a full suite of Layer2, Layer2+ and Layer3 switching functionality and offers 10GbE copper (10GBASE-T) and optical (SFP+) ports, static routing, and routing information protocol (RIP) v1/v2/ng.

MAC Address Collision Test

● D-Link DXS-3400-24TC   ● NETGEAR M4300-24X

	Incremental Addresses	Random Addresses
D-Link DXS-3400-24TC	0	37
NETGEAR M4300-24X	1,671	1,950

Note: D-Link specifies support for 48K MAC addresses, 32,768 were sent in each test. NEATGEAR specifies support for 16K MAC addresses, 16,000 were sent in each test. (As reported by IxiaNetwork v8.20)

Source: Tolly, March 2017

See the complete test results.

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TESTING METHODOLOGY

D-Link Systems commissioned Tolly to evaluate its DGS-1510-28X switch compared to a Cisco Systems SG500X, an HPE OfficeConnect 1950, and a NETGEAR S3300. All switches offer 24 ports of Gigabit Ethernet and four ports of 10GbE. Performance tests were conducted at both layer 2 and layer 3, and included ATIS power consumption measurements and TEER analysis.

The D-Link DGS-3630-28TC switch (24GbE and four 10GbE ports) running Enhanced Image was compared to a Cisco Systems Catalyst 3650-24TD-E switch (26GbE and two 10GbE ports). Tests were conducted using all ports at layer 2 and layer 3, and included ATIS power consumption measurements.

The D-Link DXS-3400-24TC 10GbE switch was tested against the NETGEAR M4300-24X. Both switches offer 24 ports of 10 Gigabit Ethernet. Performance tests measured layer 2 throughput, latency, and MAC address collision avoidance.

The Tolly Group is the premier independent test lab and a leading provider of third-party validation services for vendors of IT products, components, and services.

¹ D-Link DXS-3400-24TC not tested against the NETGEAR M4300-24X
² D-Link DXS-3400-24TC power consumption 1% higher than NETGEAR M4300-24X

D-Link Switches: The Foundation for Secure, Reliable Business Networks

D-Link Network Switches lay the foundation for secure and reliable business networks — each product offers the flexibility, simplicity, safety, and cost savings you need for a successful installation. The D-Link network switch portfolio includes unmanaged, smart managed, and fully managed switches to meet a wide spectrum of business needs.

Explore D-Link Network Switches

Find out more at **eu.dlink.com**