



TigerStack SwitchReady, Multi-Segment Stackable Hubs

Unmatched Bandwidth Scalability for Ethernet Workgroups

- ◆ Stackable up to Eight Units
High to Form a 224-Port
Multi-Media Hub
- ◆ Segmentable up to 32
Ethernet Segments per Stack
- ◆ Scalable up to 320 Mbps of
Aggregate Bandwidth
- ◆ Manageable via SNMP
In-Band, Out-of-Band, or Remote
- ◆ "TA" Hubs Support Slide-in
Modules and Redundant Power
- ◆ Low Price per Managed Port
- ◆ Limited Lifetime Warranty

SMC's TigerStack™ hubs provide a powerful combination of scalable bandwidth, network management and configuration options for building high-performance Ethernet networks. These multi-segment, stackable hubs feature unsurpassed flexibility, allowing users to grow or modify their networks as their needs change.

A single hub supports a small workgroup and can be expanded to a stack of eight units with up to 224 ports. Twisted pair, coax and fiber are available to meet specific cabling needs. SNMP management can be added at any time. And, since the TigerStack is SwitchReady™, bandwidth can be substantially increased by capitalizing on microsegmentation and LAN switching technologies.

"Bandwidth-on-demand" is achieved by isolating groups of ports within the hub or within the stack. A fully configured stack can contain as many as 32 independent LAN segments (separate 10 Mbps collision domains) with an aggregate bandwidth potential of 320 Mbps. Depending on connectivity or bandwidth requirements, these segments may be interconnected through an SMC workgroup switch and managed by a single SNMP module. And, as bandwidth requirements increase, SMC's TigerStack 100, a Fast Ethernet stackable hub based on the same scalable concepts, can be easily integrated into the network via a switch.

In addition to a very low price per managed port, these easy-to-use hubs provide exceptional reliability and value. And, SMC's ISO 9002-certified manufacturing processes and reputation for quality allow us to offer a limited lifetime warranty and free technical support.



- ◆ Stackable in Any Combination of Eight Units
- ◆ Expandable to 224 Ports
- ◆ Segmentable to 32 Collision Domains
- ◆ Scalable to 320 Mbps of Aggregate Bandwidth

Stackable and Expandable
 Start with a single hub and add more hubs as the network expands. As many as eight can be stacked in any combination for up to 224 ports. TigerStack hubs are all fully compatible with IEEE 802.3 Ethernet specifications. And, they're available with 10BASE-T, Telco, coax, fiber and AUI connectors to address a wide variety of customer configurations, so users are sure to find just the right hubs for their network.

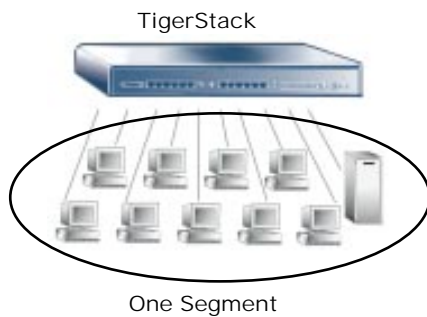
Highly Segmentable for Scalable Bandwidth
 The ports on each TigerStack hub are segmentable into either two or four repeater groups, depending upon the model. Initially, these groups are united into a single 10 Mbps LAN segment via the inter-repeater bus which runs through the stacking cable.

Repeater groups may be easily isolated from the bus at the flip of a switch or through EliteView™ software to form as many as 32 separate 10 Mbps LAN segments (collision domains). Isolated repeater groups can be interconnected via an SMC switch, with one port in each group serving as an uplink to the switch.

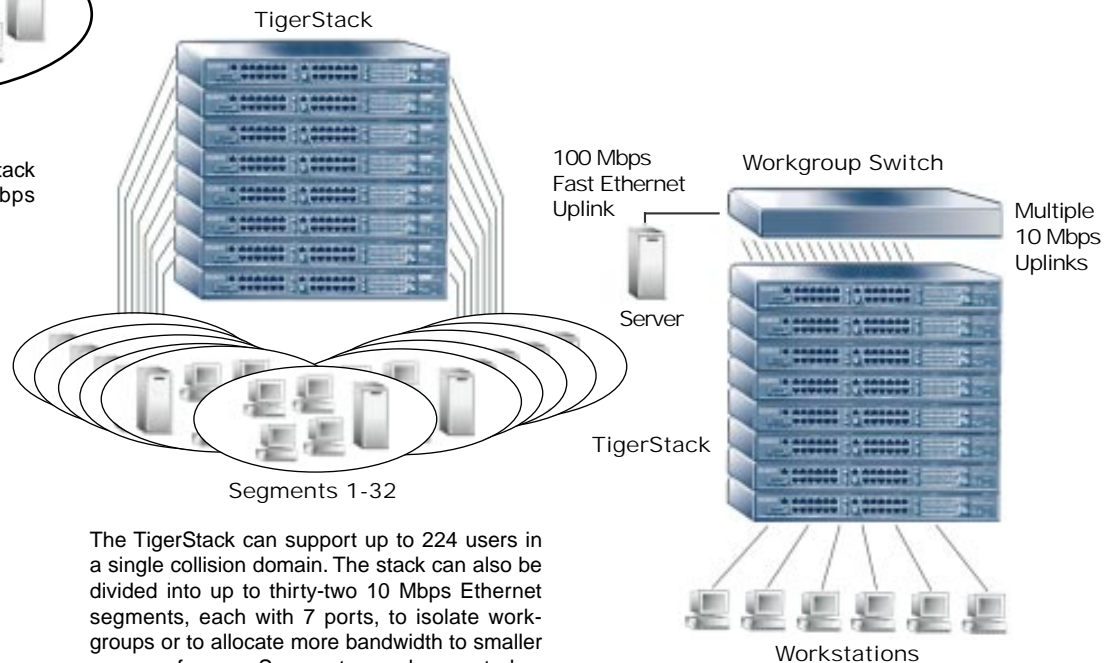
Since a switch provides wire-speed throughput to each segment, the TigerStack/switch combination can easily allocate and scale bandwidth to workgroups that need it.

The Segmentation Concept

By reducing the number of nodes on a segment, microsegmentation minimizes contention and boosts the average available bandwidth per node.



In small networks, the TigerStack provides cost-effective 10 Mbps bandwidth for the entire LAN.



The TigerStack can support up to 224 users in a single collision domain. The stack can also be divided into up to thirty-two 10 Mbps Ethernet segments, each with 7 ports, to isolate workgroups or to allocate more bandwidth to smaller groups of users. Segments can be created or changed quickly and easily via front-panel switches or SNMP software control.

Topping the stack with an SMC switch increases the aggregate bandwidth of the network and switches traffic between the LAN segments. The additional bandwidth can be allocated across the workgroups and servers as required.

SNMP Manageable:

- ◆ In-Band
- ◆ Out-of-Band
- ◆ Remote

Manageable

SMC's Network Management Module (NMM) is a cost-effective option for administrators who wish to add monitoring, control and fault isolation functions to their LAN.

For economy, only a single NMM is needed to manage and control an entire 8-hub stack—whether it's a single segment or as many as 32.

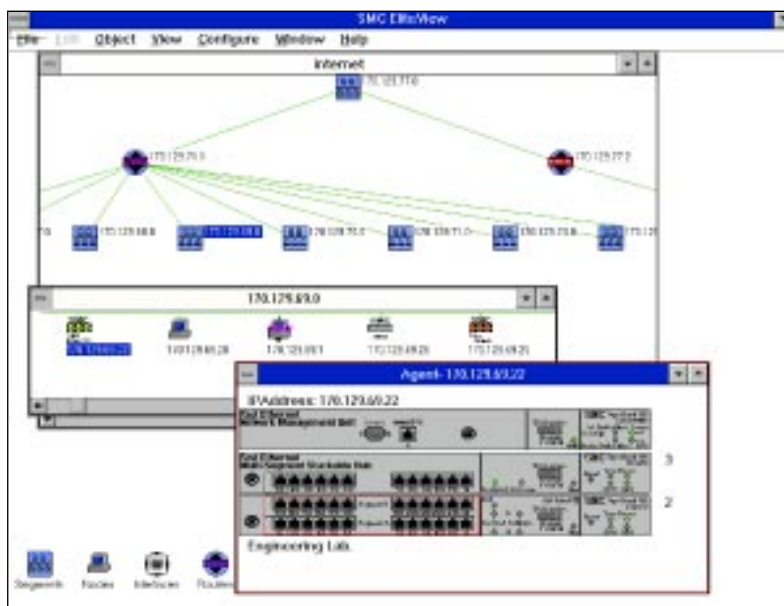
For added flexibility, the NMM is easily field-installable and may be placed anywhere in the stack rather than in just the top- or bottom-most device.

For effective control, the entire TigerStack can be managed both in-band and out-of-band (locally and remotely) with EliteView for Windows, SMC's low-cost, Windows-based SNMP manager. EliteView will also manage all of SMC's *intelligent* Ethernet and Token Ring products, as well as third-party devices.

With the NMM, two data paths—primary and secondary—can be established between the TigerStack and connected devices for redundancy. Activated automatically if the primary path is partitioned or loses its connection, the secondary path provides a measure of fault tolerance and minimizes the risk of network downtime.

Adding EliteView to a manageable TigerStack offers:

- Auto-discovery
- Traffic utilization
- Performance statistics
- Port control
- Segment control
- Port security (MAC address)
- Trap/event notification
- On-line help
- Dynamic Data Exchange (DDE)
- Data path redundancy
- Real-time graphics
- Mouse support



SMC's EliteView SNMP manager provides an easy-to-use, graphical user interface for point-and-click access to a rich array of important statistics. It enables network administrators to manage and control all operational aspects of the TigerStack—as well as SMC's full line of intelligent LAN products.

- ◆ Low Profile
- ◆ Flexible Chassis Design for Rack, Wall or Table Mounting
- ◆ Lifetime Warranty

Easy to Install and Use

TigerStack hubs feature a low profile—they're only one rack unit high (1.75 in.)—for maximum density in a standard 19-inch equipment rack. These hubs can also be placed on a flat surface or mounted on a wall. Rack-mount brackets are included, along with an internal auto-ranging power supply for worldwide operation.

Cascading

Each twisted-pair repeater group has its own MDI/MDI-X crossover switch, so straight-through cable can be used when cascading the segment to a switch, another TigerStack hub, an SMC standalone hub (such as one of the EtherEZ™ hub models), or another vendor's 10BASE-T hub.

Troubleshooting

Power-up diagnostics detect and report errors and initialize all the hubs in the stack. Also, each port has its own Link, Activity and Partition indicators, so it's easy to see hub and port status at a glance.

Configuring

A built-in utility is provided for out-of-band setup and configuration of the hubs (both local and remote), as well as updating of the hubs with the latest firmware via TFTP.

New Features for "TA" Hubs

The 3312TA and 3326TA, our second generation TigerStack hubs, offer added flexibility and fault-tolerance. On these models, the fixed AUI and BNC ports have been replaced by a pair of expansion ports. This way, you can choose

from a 10BASE-T, fiber, AUI or BNC slide-in module for each expansion port.

What's more, isolated repeater groups on the 3312TA and the 3326TA hubs can be combined to form a larger collision domain. For example, two, three or four repeater groups on the 3326TA can be joined to form a collision domain with 14, 21 or even 28 ports.

These hubs also support a Redundant Power Unit (RPU) to minimize downtime in the event of an internal power supply failure. You have your choice of SMC's RPUX5, a unit with its own power cord, so it can power up to five devices from a separate circuit breaker, or SMC's RPUX1, a unit that can supply power to a single device.

Quality, Reliability, and Value

With the TigerStack family, as with all of SMC's other products, our customers are getting the quality, reliability and value they've come to expect from SMC. We've leveraged our own repeater silicon with its enhanced microsegmentation capabilities, our expertise in hub design, and our economical EliteView management software to provide more features and greater performance at a very low price per managed port.

There's added value, too, with our limited lifetime warranty and free technical support.

Specifications—TigerStack Hubs

TigerStack 3312TA

Ports

- 12 10BASE-T
- 2 expansion, for slide-in modules

Ethernet Interface

- Ports 1-5, 8-12
 - Twisted-pair, fixed crossover
- Ports 6, 13
 - Twisted-pair, switch-selectable crossover
- Ports 7, 14
 - Expansion

Segments/Unit

2

Weight

7.2 lb. (3.27 kg)

AC Input Power

- Maximum
 - 18.5 W (23.0 W with NMM)
- Typical
 - 14.8 W (19.0 W with NMM)

DC Input Connector

- 14-pin, for Redundant Power Unit

DC Input Power, maximum

- +5 VDC @ 1.8 A, +12 VDC @ 700 mA w/o NMM
- +5 VDC @ 2.7 A, +12 VDC @ 800 mA with NMM

TigerStack 3326TA

Ports

- 26 10BASE-T
- 2 expansion, for slide-in modules

Ethernet Interface

- Ports 1-5, 8-12, 15-20, 22-27
 - Twisted-pair, fixed crossover
- Ports 6, 13, 21, 28
 - Twisted-pair, switch-selectable crossover
- Ports 7, 14
 - Expansion

Segments/Unit

4

Weight

7.6 lb. (3.45 kg)

AC Input Power

- Maximum
 - 26.7 W (32.0 W with NMM)
- Typical
 - 21.0 W (25.5 W with NMM)

DC Input Connector

- 14-pin, for Redundant Power Unit

DC Input Power, maximum

- +5 VDC @ 3 A, +12 VDC @ 700 mA w/o NMM
- +5 VDC @ 3.9 A, +12 VDC @ 800 mA with NMM

TigerStack 3314T

Ports

- 14 10BASE-T

Ethernet Interface

- Ports 1-6, 8-13
 - Twisted-pair, fixed crossover
- Ports 7, 14
 - Twisted-pair, switch-selectable crossover

Segments/Unit

2

Weight

4.15 lb. (1.88 kg)

AC Input Power

- Maximum
 - 11.0 W (15.7 W with NMM)
- Typical
 - 9.8 W (14.0 W with NMM)

TigerStack 3328T

Ports

- 28 10BASE-T

Ethernet Interface

- Ports 1-6, 8-13, 15-20, 22-27
 - Twisted-pair, fixed crossover
- Ports 7, 14, 21, 28
 - Twisted-pair, switch-selectable crossover

Segments/Unit

4

Weight

4.7 lb. (2.13 kg)

AC Input Power

- Maximum
 - 22.7 W (26.0 W with NMM)
- Typical
 - 17.0 W (21.5 W with NMM)

TigerStack 3328TELCO

Ports

- 28 10BASE-T (2 Telco, 4 RJ-45)

Ethernet Interface

- Ports 1-6, 8-13, 15-20, 22-27
 - Twisted-pair via 50-pin Telco connectors
- Ports 7, 14, 21, 28
 - Twisted-pair, switch-selectable crossover

Segments/Unit

4

Weight

4.7 lb. (2.13 kg)

AC Input Power

- Maximum
 - 22.7 W (26.0 W with NMM)
- Typical
 - 17.0 W (21.5 W with NMM)

TigerStack 3306BC

Ports

- 6 BNC
- 1 10BASE-T
- 1 AUI

Ethernet Interface

- Ports 1-3, 5-7
 - Thin coax, RG-58A/U or RG-58C/U
- Port 4
 - AUI, External Transceiver Drop
- Port 8
 - Twisted-pair, switch-selectable crossover

Segments/Unit

2

Weight

4.35 lb. (1.97 kg)

AC Input Power

- Maximum
 - 36.5 W (40.0 W with NMM)
- Typical
 - 28.0 W (34.0 W with NMM)

TigerStack 3306FC

Ports

- 6 ST
- 1 BNC
- 1 AUI

Ethernet Interface

- Ports 1-3, 5-7
 - 50/125, 62.5/125, 80/125, 100/140 micron core fiber
- Port 4
 - AUI, External Transceiver Drop
- Port 8
 - Thin coax, RG-58A/U or RG-58C/U

TigerStack 3306FC (continued)

Segments/Unit

2

Weight

4.15 lb. (1.88 kg)

AC Input Power

- Maximum
 - 27.3 W (33.88 W with NMM)
- Typical
 - 21.84 W (27.1 W with NMM)

All TigerStack Hubs

Network Interface

- RJ-45 (UTP Cable; EIA/TIA Categories 3, 4, 5)
- BNC (Coax Cable, RG-58A/U or RG-58C/U)
- ST (50/125, 62.5/125, 80/125 or 100/140 micron core fiber)
- AUI (External Transceiver Drop)

Size

- 1.75 in. H x 16.875 in. W x 9.0 in. D
- (4.4 cm x 43.2 cm x 22.9 cm)

LEDs

- Power
- NMM
- Collision - one per segment
- Segment - one per segment
- Port Status - one per port

Temperature

- Operating
 - 32° to 113° F (0° to 45° C)
- Storage
 - 32° to 185° F (0° to 85° C)

Humidity

- Operating
 - 0% to 90%
- Storage
 - 0% to 95%

Power Supply

- Internal, auto-ranging transformer
- 100 to 240 VAC, 50 to 60 Hz

Standards

- IEEE 802.3
- ISO/IEC 8802-3

Compliances

- CE marking
- Safety
 - UL 1950
 - CSA 22.2 No. 950
 - EN60950 (TÜV)
- Emissions
 - FCC Class A
 - CDOC Class A
 - EN55022 (CISPR 22) Class A
 - VCCI Class 1
- Immunity
 - EN50082-1

Warranty

- Limited Lifetime on Unit
- 5 years on Power Supply and Fan

For information, call or fax:

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Hauppauge, NY
Phones: (800) SMC-4-YOU
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◆ SMC—Asia
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Fax: 65-320-8359

◆ TMC—Japan
Tokyo, JAPAN
Phone: 81 (3) 57212271
Fax: 81 (3) 57212270

◆ SMC—EliteFax™
Fax-on-Demand System
US/Canada: (800) SMC-8329
Elsewhere: (516) 435-6107

World Wide Web
<http://www.smc.com/>

Specifications—TigerStack Accessories

Slide-in Modules for "TA" Hubs

AUI Module (3300-A)
AUI port
15-pin D-type connector

Thin Coax Module (3300-C)
10BASE2 port
BNC connector

Fiber Module (3300-F)
10BASE-F port
Dual ST connectors

Twisted-Pair Module (3300-T)
10BASE-T port
RJ-45 connector, straight-through

Stacking Cable

Connector
50-pin conductor

Cable
SCSI

TigerStack NMM

Size
0.61 in. H x 7.4 in. W x 6.0 in. D
(1.6 cm x 18.8 cm x 15.2 cm)

Weight
0.45 lb. (0.20 kg)

Operating Voltage
+5 VDC ± 5% @ 700 mA (typical),
1000 mA (maximum)
+12 VDC ± 5% @ 50 mA (typical),
80 mA (maximum)

Serial Port Interface
RS-232C connector
Support for SLIP

MIB Support
Repeater MIB
MIB II
SMC Enterprise MIB

Product	Order Number	Description
TigerStack*	SMC3312TA	10BASE-T Hub with 12 RJ-45 Ports, 2 Expansion Ports
	SMC3326TA	10BASE-T Hub with 26 RJ-45 Ports, 2 Expansion Ports
	SMC3312TC	10BASE-T Hub with 12 RJ-45 Ports, 1 BNC Port, 1 AUI Port
	SMC3326TC	10BASE-T Hub with 26 RJ-45 Ports, 1 BNC Port, 1 AUI Port
	SMC3314T	10BASE-T Hub with 14 RJ-45 Ports
	SMC3328T	10BASE-T Hub with 28 RJ-45 Ports
	SMC3328TELCO	10BASE-T Hub with 2 Telco Ports, 4 RJ-45 Ports
	SMC3306BC	Thin Coax Hub with 6 BNC Ports, 1 RJ-45 Port, 1 AUI Port
	SMC3306FC	Fiber Hub with 6 ST Ports, 1 BNC Port, 1 AUI Port
	Accessories	SMC3300-CABLE
SMC3300-NMM		Optional Network Management Module
ELITEVIEW x.x		SNMP-based Network Management Software
SMC3300-A		Slide-in Module with AUI Port
SMC3300-C		Slide-in 10BASE2 Module with BNC Port
SMC3300-F		Slide-in 10BASE-F Module with dual ST Ports
SMC3300-T		Slide-in 10BASE-T Module with RJ-45 Port
SMCRPUX1		Redundant Power Unit, supports 1 device
SMCRPUX5		Redundant Power Unit, supports 5 devices
Bundles		SMC3312TAi
	SMC3326TAi	SMC3326TA with factory-installed SMC3300-NMM
	SMC3300A-56PORTS	SMC3326TA with factory-installed SMC3300-NMM, plus SMC3328T, SMC3300-CABLE and ELITEVIEW

* US Power Cord included. Hubs also available with Continental Europe or UK Power Cord.