Allied Telesis™

AT-2812FX
Secure Network Interface Module

AT-2812FX

100Mbps, 34mm, ExpressCard/34 with SC connector

Overview
The AT-2812FX (100FX/SC 34mm fiber ExpressCard/34) network interface module is an ideal fit for fiber to the laptop networks that depend on secure and reliable systems. The single-piece, integrated design of the AT-2812FX endures frequent use with no damage to the fiber connectors, making it a solid solution for military and government.

Mobile Connectivity Through Fiber
Allied Telesis' AT-2812FX ExpressCard/34 module is designed to provide notebook computers with network connections through a high-speed fiber-optic link via a 34mm ExpressCard™ interface. The AT-2812FX module features an SC fiber connection, supports the Microsoft Windows 7, 2003, XP and Vista operating systems, and is compliant with industry standards.

Comprehensive Software Support
Allied Telesis' AT-2812FX interface modules feature software to assist users with network setup and configurations. An offline user diagnostics program provides system administrators and engineers with a valuable tool to analyze the interface module and check data. Finally, the AT-Setup program simplifies controlling and configuring all AT-2812FX modules.

Secure Encrypted Data Transmssion
IP Security (IPSec) is a suite of protocols for securing Internet Protocol (IP) communications by authenticating and/or encrypting each IP packet in a data stream. The cryptographic algorithms that are used in IPSec operation are computationally intensive, which can overwhelm the host CPU at high network speeds. The AT-2812FX implements hardware that performs these computationally intensive cryptographic algorithms, which is known as IPSec task offload v2. The AT-2812FX supports the transport mode of IPSec Authentication Header (AH) and Encapsulation Security Payload (ESP) protocols for end-to-end security of packet traffic. Simultaneous AH and ESP task offload is also supported for up to 32 security associations (SA).

DASH
The Desktop and mobile Architecture for System Hardware (DASH) is a DMTF Management Initiative that represents a suite of specifications which standardize the manageability interfaces for mobile and desktop hardware. The DASH suite of specifications defines the interfaces for management in the form of protocols and profiles for representing mobile and desktop hardware. Fundamental to the DASH is the underlying goal to unify the experience achieved through out of-band mechanisms with those available via the operating system.

Hassle Free Support
All Allied Telesis network interface modules offer technical support, ensuring trouble-free installation.

Key Features

- Advanced centralized power management

- Secure data transmission

- NDIS 6 IPSec task offload compliant (Vista logo compliant)

- 32 security associations

- DASH manageability complaint with v1.1 as defined by the desktop and mobile workgroup

- IPv4 and IPv6 Large Send Offload and Checksum Offload (LSO/TCO)

- Statistics for SNMP MIB II

- Wake-on-LAN (WoL) supported (enabled by default, utility to disable available in firmware)

- Will work in 34 or 54mm ExpressCard slots

Technical Specifications

Status Indicators

System LEDs

1 LED indicating link/activity

Interface Standards

IEEE 802.3u	Fast Ethernet
IEEE 802.3x	Full-duplex
ExpressCard/34	
DASH v 1.1.0	

Physical Characteristics

Dimensions	13.7cm x 3.4cm
(W x H)	(5.4in x 1.3in)
Weight	0.05 lb (0.02kg)

Power

Power consumption	2.5 Watts @ 3.3V

Environmental Specifications

Maximum operating temperature	0°C to 40°C (32°F to 104°F)
Maximim storage temperature	-25°C to 70°C (-13°F to 158°F)
Relative humidity operating and storage	5% to 95% non-condensing
Operating and storage altitude	Up to 3,048 meters (10,000ft)
Predicted MTBF (Telcordia SR332)	3,210,000 hrs

Optical Characteristics

Connector type	SC

Output Power (dBm)		
Min.	Max	Wavelength
-20	-14	1310nm SC

Receive Power (dBm)		
Min.	Max	Wavelength
-31	-11	1310nm

Data Encryption

IPSec task offload v2
32 Security Associations (SA)
AH transport for both IPv4 and IPv6 (AES-GMAC)
ESP transport for both IPv4 and IPV6
    (AES-GMAC) (AES-GCM)

Standards

EMI part 15

FCC class B, EN55022 class A, VCCI class A, C-Tick, CE
ExpressCard compliant

Immunity

EN55024

Safety

UL60950-1 (cULUS), EN60950-1 (TUV)
EN60825

Electrical Interfaces

UL60950-1 (cULus)
EN60950-1 (TUV)
CAN/CSA C22.2 No. 60950-1

Drivers

Supported

Windows 7
Windows XP
Windows 2003
Windows Vista

Ordering Information

AT-2812FX-xxx
100Mbps, ExpressCard/34 with SC connector

Where xxx =	001 for single pack
	901 for single pack, compliant with Trade Agreements Act

Connecting The (IP) World

Allied Telesis