



## ATLAS X60

### Installation Manual

Copyright© Teldat-DM695-I Version 4.1 7/2015 Teldat S.A.

## **Legal Notice**

### Warranty

This publication is subject to change.

Teldat S.A. offers no warranty whatsoever for information contained in this manual.

Teldat S.A. is not liable for any direct, indirect, collateral, consequential or any other damage connected to the delivery, supply or use of this manual.

# Table of Contents

I	Important Information . . . . .	1
Chapter 1	Installing the Router . . . . .	2
1.1	Introduction . . . . .	2
1.1.1	Device description . . . . .	2
1.2	Connections . . . . .	3
1.2.1	Power Source Connection . . . . .	3
1.2.2	Connections . . . . .	4
1.3	Meaning of the LEDs . . . . .	6
1.3.1	ATLAS 160 and ATLAS 260 . . . . .	6
1.3.2	ATLAS 360 . . . . .	7
1.4	Programming the microswitches . . . . .	8
1.4.1	Procedure to ignore the configuration . . . . .	8
1.5	PMC-PCI Cards . . . . .	10
1.5.1	Procedure to install PMC cards . . . . .	10
1.6	16 Port SWITCH Board . . . . .	12
Appendix A	Technical Information. . . . .	14
A.1	Troubleshooting . . . . .	14
A.2	Updating the software . . . . .	14
A.3	Connectors . . . . .	14
A.3.1	LAN (GE x) Connector . . . . .	15
A.3.2	Configuration Connector. . . . .	15
A.4	Technical Specifications . . . . .	15
Appendix B	Safety information . . . . .	18
B.1	Recycling and the Environment. . . . .	18
B.2	Translated Safety Warnings . . . . .	18



## I Important Information



### Caution

The manufacturer reserves the right to make changes and improvements to the appropriate features in both the software and hardware of this product, modifying the specifications of this manual without prior notice.

The images presented on the front and back panels of the devices are provided as an information guideline. Some small modification can exist in the actual device.



### Warning

The equipment is intended to be installed by Service Personnel and only handled by qualified personnel. If not, the device may be damaged and malfunction.

This device contains elements that are sensitive to electrostatic surges and shocks. Therefore, it is essential when handling the equipment that an antistatic wriststrap is connected to the device chassis and that this is placed on an antistatic mat. Furthermore, it is crucial to avoid any kind of contact between the device components and necklaces, bracelets, rings, ties, etc.

# Chapter 1 Installing the Router

## 1.1 Introduction

The **ATLAS X60** routers are modular devices incorporating encryption hardware and designed with network convergence in mind, as they support IP Telephony and the possibility to encode video.

Teldat proposes the **ATLAS X60** for wireless technology, both for the local network, with wireless access point functionality, as well as for the wide area network as this device supports the following interface cards: GSM, GPRS, EDGE, UMTS, HSDPA, CDMA2000, EV-DO and WiMAX.

The **ATLAS X60** executes the “Teldat Internetworking Code” (CIT) which runs in all the Teldat switch-router families. It is characterized by a wide variety of functionalities, especially designed to satisfy the access needs to corporate data networks. The capacity of the Teldat Internetworking Code for remotely managing devices, the possibility of implementing Quality of Service mechanisms (QoS), security mechanisms and the ability to create Virtual Private Networks through IPSec or L2TP, together with the wide range of protocols and IP routing and bridging functionalities, make this an outstanding feature.

The **ATLAS X60** router family can be expanded with up to 4 PCI cards, allowing you to increase the number of interfaces in the device.

This manual will show you how to install and connect these devices.

### 1.1.1 Device description



Fig. 1: ATLAS 160 and ATLAS 260 Router



Fig. 2: ATLAS 360 Router

	ATLAS 160	ATLAS 260	ATLAS 360
FLASH	16M	16M	64M
RAM	128M	128M	256M
PCI SLOTS	2	3	4

MINIPCI	1	1	1
LAN	2 GE	2 GE	2 GE
SWITCH	NO	NO	16 (optional)
HW ENCRYPTION	YES	YES	YES

## 1.2 Connections



### Caution

Before connecting the router, please read the following instructions carefully.

### Workplace Conditions. Main Characteristics

- Excessive cold and heat should be avoided, as should humidity and dust.
- Direct exposure to sunlight should be avoided as well as other heat sources. The device should not be placed amongst papers, magazines or other elements that could hinder natural air circulation.
- The device should not be placed very close to strong electromagnetic fields such as speakers, engines, etc.
- Knocks and/or strong vibrations should be avoided during transport, operation and storage.



### Warning

The electric current in power cables, telephone lines and communication cables is dangerous. To prevent electric shocks, before installing, handling or opening the equipment covers, connect and disconnect the cables as follows:

To Connect	To Disconnect
Make sure that the device's power supply switch is in the OFF position	Turn the switch OFF
Connect all data cables	Disconnect the power supply from the device
Connect the power supply to the device	Disconnect the data cables
Turn the power supply switch to the ON position	

### 1.2.1 Power Source Connection

The **ATLAS X60** router is powered with an internal power source.

To avoid electric shocks, residual current circulation and other unwanted effects, also affecting communications, the following is recommended:



### Warning

All interconnected communication devices should be plugged to THE SAME GROUNDED POWER OUTLET, which should at the same time be of good quality (lower than 10 ohms).

Whether the workplace is provided with an uninterrupted power supply system (UPS), regulated supply or it is independent from the rest (such as lighting, etc.); it is highly recommended that all data devices should be connected to the same power source. This will avoid operating and premature aging problems of drivers and other components.



Fig. 3: Connecting the ATLAS 160 and ATLAS 260 power supply

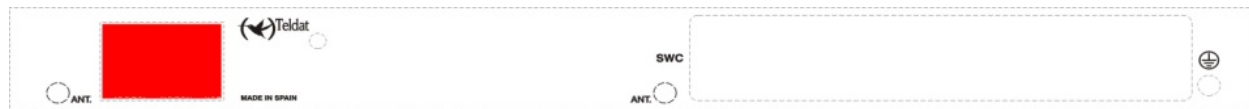


Fig. 4: Connecting the ATLAS 360 power supply

To connect the power source to the device, follow the steps listed in the previous table: ensure that the switch is OFF (0) and the power supply is NOT connected to the main electricity supply; find the POWER plug (located on the rear panel of the device) and insert the power cable. Please use the grounded cable supplied with the device for this purpose.

## 1.2.2 Connections

The **ATLAS X60** router has the following connectors available. Some of these connectors may not be available depending on the model:

### 1.2.2.1 Interfaces GigaEthernet

#### GE 0, GE 1:

GigaEthernet Interfaces. The ATLAS 360 router has two connectors to connect to Ethernet networks. Each interface has two connectors: one optic connector (1000 LX SFP-LC) and one metal one (10/100/1000 Base-T).

The **ATLAS 160** and **ATLAS 260** routers only have one metallic connector available (10/100/1000 Base-T).

The second LAN (GE 1) requires a software license in order to operate it.



Fig. 5: Giga Ethernet ATLAS 160 and ATLAS 260 connectors



Fig. 6: Giga Ethernet ATLAS 360 connectors

### 1.2.2.2 Connecting the antenna

#### ANT.:

The **ATLAS X60** router has two connectors for an external antenna, used to improve the quality of the signal received and transmitted by the Wireless LAN module. This module is optional and it's possible that your device does not have a Wireless LAN or antennas. To assemble and dismantle the antennas, simply screw them into the connectors labeled ANTE (located on the rear of the device).

For the Wireless LAN interface to operate, the device must have a plug-in Wireless LAN card and the corresponding software license. Depending on the model, the antennas are installed in the device by default. If your device does not have the Wireless LAN module incorporated, you can obtain this later on. The manual provided will indicate how to install the module and its antenna cables in the device.



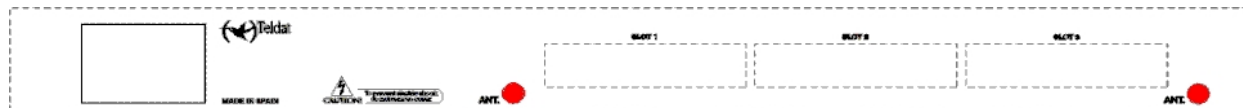


Fig. 7: Antenna connector for the Wireless LAN ATLAS 160 and ATLAS 260

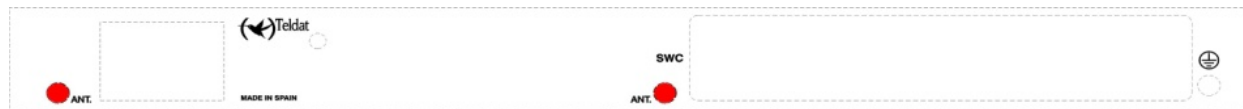


Fig. 8: Antenna connector for the Wireless LAN ATLAS 360

### 1.2.2.3 Connecting for configuration

The **ATLAS X60** router has a RJ45 female connector on the front panel referred to as "**CONF.**", which provides access to the device local console. In order to configure this, you must connect the "**CONF.**" port to an asynchronous terminal (or to a PC with terminal emulation).



#### Note

Configuration for the terminal must be:

- Speed: 9600 bps.
- Eight data bits.
- One stop bit.
- No parity bit.
- No type of flow control.

Connection to the configuration port can be carried out using the RJ45 connectors cable, provided with the device, together with the RJ45 Female-DB9 Female adaptor (also provided with the device).

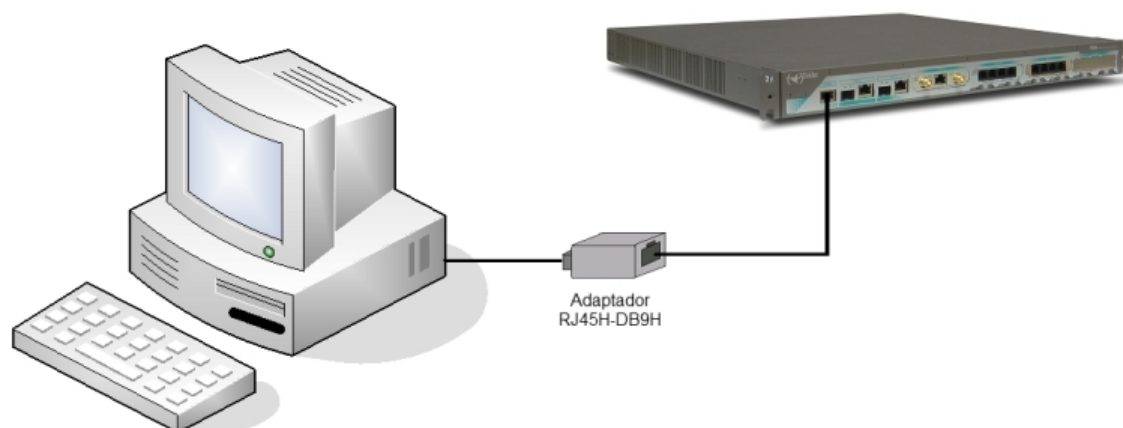


Fig. 9: Connecting for configuration



Fig. 10: The CONF connector for the ATLAS 160 and ATLAS 260

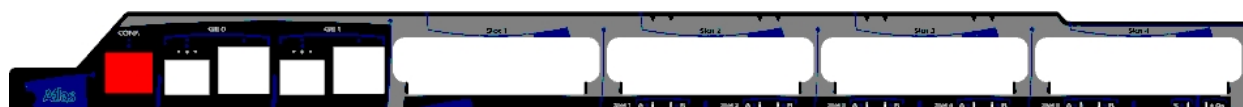


Fig. 11: The CONF connector for the ATLAS 360

## 1.3 Meaning of the LEDs

### 1.3.1 ATLAS 160 and ATLAS 260



Fig. 12: ATLAS 160 and ATLAS 260 LEDs

<b>ON</b>	Power-on indicator. It lights up when connected to the power supply.
<b>SLOT [1-3]</b> <b>A &amp; B</b>	Depends on the card installed in the PCI Slot. Normally: <b>OFF:</b> Interface not available or not installed (not supported). <b>RED:</b> Interface not established, without data connection. <b>YELLOW:</b> Connecting. <b>GREEN:</b> Communications established.
<b>SLOT 4</b> <b>A &amp; B</b>	The device has a MINI-PCI slot where you can install a Wireless LAN daughter card.  Please see the manual on Wireless LAN interfaces to check how the LEDs operate.

#### Specific connector LEDs

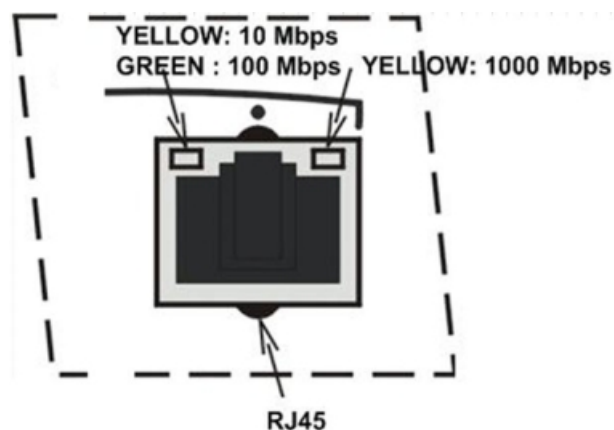


Fig. 13: Specific connector LEDs

<b>GEX</b>	Metallic connector:  -Left: <b>ORANGE:</b> 10Mbps. Flashing depends on the activity. <b>GREEN:</b> 100Mbps. Flashing depends on the activity.  -Right: <b>YELLOW:</b> 1000Mbps. Flashing depends on the activity.  <b>OFF:</b> Both off means the link has not been detected.
------------	--

### 1.3.2 ATLAS 360

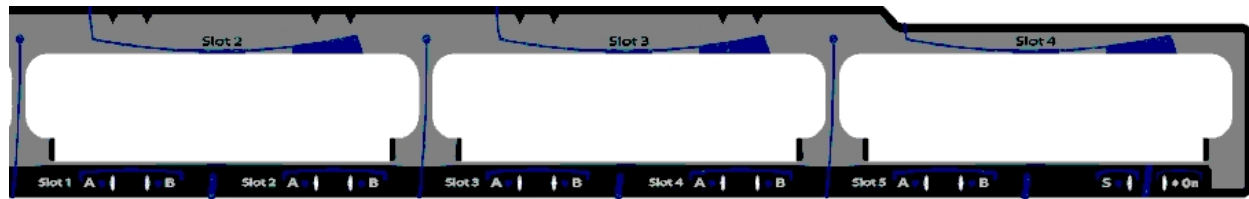


Fig. 14: ATLAS 360 LEDs

<b>ON</b>	Power-on indicator. It lights up when connected to the power supply.
<b>S</b>	Router operation <b>OFF:</b> System stopped. <b>STEADY:</b> System initialized and operating.
<b>SLOT [1-4] A &amp; B</b>	Depends on the card installed in the PCI Slot. Normally this is: <b>OFF:</b> Interface not available or not installed (not supported). <b>RAPID FLASHING:</b> Interface not established, without data connection. <b>SLOW FLASHING:</b> Connecting. <b>STEADY:</b> Communications established.
<b>SLOT 5 A &amp; B</b>	The device has a MINI-PCI slot where you can install a Wireless LAN daughter card.  Please see the manual on Wireless LAN interfaces to check how the LEDs operate.

#### Specific connector LEDs

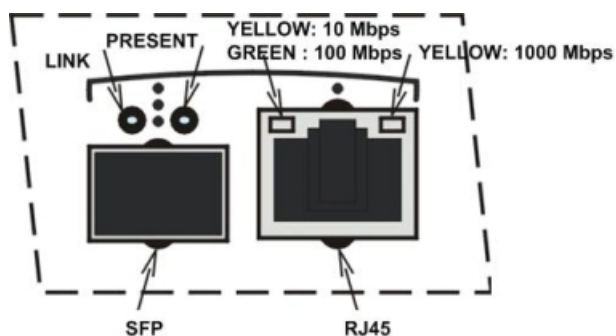


Fig. 15: Specific connector LEDs

<b>GEX</b>	Optic connector: -Left: link and activity detection <b>OFF:</b> There is no link. <b>RED:</b> Link detected. Flashing depends on the activity.  -Right: SFP present <b>OFF:</b> SFP not present. <b>RED:</b> SFP present.
------------	--

Metallic connector:

-Left:

**ORANGE:** 10Mbps. Flashing depends on the activity.

**GREEN:** 100Mbps. Flashing depends on the activity.

-Right:

**YELLOW:** 1000Mbps. Flashing depends on the activity.

**OFF:** Both off means the link has not been detected.

## 1.4 Programming the microswitches

The **ATLAS X60** router has a block of 8 available micro-switches, which are used for maintenance and test tasks. To access these you need to carry out the following steps:

- Switch off the device using the ON/OFF switch.
- Using a screwdriver, open the device.
- Have the device facing you (where the LEDs are located). In this position, the block of micro-switches can be seen in the upper left hand corner on the motherboard, next to the box ventilators.

In this case, they are only used to load the default configuration. These switches should not be handled by the user other than to establish the default configurations.



### Note

For the device to operate correctly, all micro-switches must be in the OFF position.

### 1.4.1 Procedure to ignore the configuration

Follow the steps below if you have to discard the whole configuration of the device (for instance, if you cannot remember the password).

The procedure is as follows:

- Turn off the device through the ON/OFF switch.
- Open the device.
- Using a screwdriver, move micro-switch '5' to the ON position.
- Close the device.
- Turn the device on with the ON/OFF switch.

When the device is switched on, a message similar to the one shown below will appear on the configuration console:

```
*****
***** Router Teldat *****
*****

BIOS CODE DUMP.....
BIOS DATA DUMP...
End of BIOS dump
  Boot-stack used: 0x000007A0
  Boot-stack free: 0x00001860

=====
BIOS TELDAT                                (c) Teldat
```

```

=====
FLASH BIOS CODE VERSION: 01.04 Nov 26 2007 12:29:48 L0
Current date: Dec 05 2007, Wednesday Current time:17:42:14

System Info:
PCB:0x110 GPPORCR:0x10000003 PVR:0x80210020 SVR:0x80390020
CLKs(KHz): CPU=983040 DDR=196608 LBUS=49152 PCI1=65536 PCI2=32768
Watchdog: Disabled
MMU Mode: Dynamic
ICache: ON; DCache: ON Write-Back; L2Cache: ON
CPU fan speed: 941 rpm
Case fan speed: 941 rpm

Mem Info:
DRAM size: 512 Megabytes
  BANK 0: 512 Megabytes (detected)
FLASH: 16 Mb.
NVRAM: 128 Kb.
EEPROM: 2048 Bytes.

Devices:
GIGABIT ETHERNET 1
GIGABIT ETHERNET 2
SECURITY ENGINE
PCI device: PowerPC processor, Host
  (Bus: 0, Device: 0, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)
Slot 1 - PCI device: CardBus bridge
  (Bus: 0, Device: 10, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)
PCI device: PowerPC processor, Host
  (Bus: 10, Device: 0, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)

Current production date: 07 45
Current software license: 18 92
Current serial number: 591/05411
BIOS MAC Add: 00-a0-26-10-95-23
>>
...
.....
TRYING APP CODE DUMP
  (CONFIGURED) ATLAS3G.BIN ver.: 0.10.7.12 0.0.0.0. ....
APP DATA DUMP .....
  Bios-stack used: 0x1588
  Bios-stack free: 0x2A78
  Aux-stack used: 0x13C
  Aux-stack free: 0x1EC4
Running application
Default configuration used
Parsing text mode configuration ...
Configuration parsed
Initializing

Press any key to get started

```

- On reaching this point, you can set micro-switch '5' in the OFF position. This way, the saved configuration will run the next time you restart the device.
- Finally, close the device again.

## 1.5 PMC-PCI Cards

The **ATLAS X60** features and interfaces can be amplified by inserting PMC boards (PCI mezzanine card). In order to correctly insert the card, please follow the steps given below.

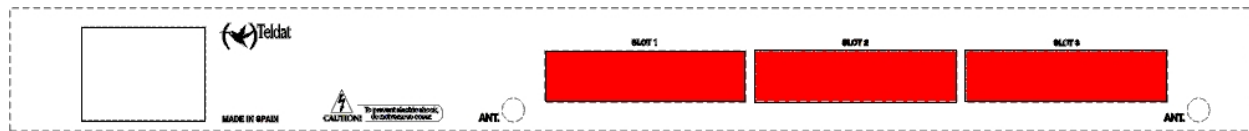


Fig. 16: PMC-PCI SLOT for the ATLAS 160 and ATLAS 260

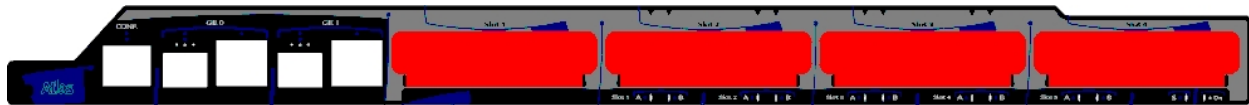


Fig. 17: PMC-PCI SLOTS for the ATLAS 360

### 1.5.1 Procedure to install PMC cards

- (1) Switch off the device and remove the cables (as described in the section on connection in this manual).
- (2) Remove the device from the workplace and place it in a stable, safe place where it can be easily accessed and handled. Open up the device. To do this, you need to remove the upper cover which is secured through two screws located on the underside of the device.
- (3) Once the screws have been removed, in order to remove the cover, slide it towards the back panel and then remove it by lifting it. Place it in a safe place
- (4) Find the place where the PMC board needs to be placed. This slot has a set of raised connectors with gold contacts and a pair of securing screws.
- (5) Remove the blind cover from the slot. This cover is located either on the rear panel (**ATLAS 160** and **ATLAS 260**) or on the front panel (**ATLAS 360**). Push this out
- (6) Place PMC board securing posts over the securing screws. Secure these firmly.
- (7) Place the PMC card in the slot so that this firstly adjusts to the space on the device rear panel and subsequently to the two PMC connectors. This operation must be carefully carried out without forcing any piece or part of the device. Check that the board is clearly seated over the PMC connectors
- (8) Screw the PMC board to the posts. For this, use two screws with their corresponding washers. Firmly tighten the screws without damaging the board.
- (9) Close the device with the cover. Secure the cover with the screws.
- (10) Connect and switch on the device as explained in the connection section. Should you detect any problems, switch off the device and make sure that the above steps have been carried out correctly. If the problem persists, please contact your usual supplier.
- (11) Connect a terminal to the console and check that the device detects the PMC board.

```

*****
***** Router Teldat *****
*****

BIOS CODE DUMP.....
BIOS DATA DUMP...
End of BIOS dump
  Boot-stack used: 0x000007A0
  Boot-stack free: 0x00001860

=====
BIOS TELDAT                                (c)Teldat
=====

FLASH BIOS CODE VERSION: 01.04  Nov 26 2007 12:29:48  L0
Current date: Dec 05 2007, Wednesday Current time:17:42:14

```

```
System Info:
PCB:0x110 GPPORCR:0x10000003 PVR:0x80210020 SVR:0x80390020
CLKs(KHz): CPU=983040 DDR=196608 LBUS=49152 PCI1=65536 PCI2=32768
Watchdog: Disabled
MMU Mode: Dynamic
ICache: ON; DCache: ON Write-Back; L2Cache: ON
CPU fan speed: 941 rpm
Case fan speed: 941 rpm

Mem Info:
DRAM size: 512 Megabytes
  BANK 0: 512 Megabytes (detected)
FLASH: 16 Mb.
NVRAM: 128 Kb.
EEPROM: 2048 Bytes.

Devices:
GIGABIT ETHERNET 1
GIGABIT ETHERNET 2
SECURITY ENGINE
PCI device: PowerPC processor, Host
  (Bus: 0, Device: 0, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)
Slot 1 - PCI device: CardBus bridge
  (Bus: 0, Device: 10, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)
PCI device: PowerPC processor, Host
  (Bus: 10, Device: 0, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)

Current production date: 07 45
Current software license: 18 92

Current serial number: 591/05411
BIOS MAC Add: 00-a0-26-10-95-23
>>
...
.....
TRYING APP CODE DUMP
  (CONFIGURED) ATLAS3G.BIN ver.: 0.10.7.12 0.0.0.0. ....
APP DATA DUMP .....
  Bios-stack used: 0x1588
  Bios-stack free: 0x2A78
  Aux-stack used: 0x13C
  Aux-stack free: 0x1EC4
Running application
Parsing text mode configuration ...
Configuration parsed
Initializing

Press any key to get started
```

## 1.6 16 Port SWITCH Board

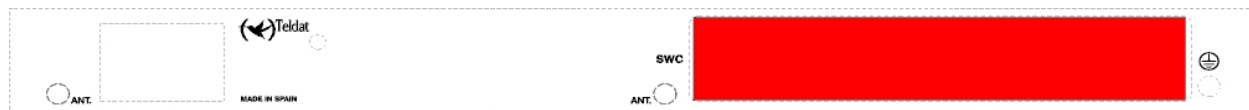


Fig. 18: “SWC” SLOT for the ATLAS 360 16 port Switch board

The **ATLAS 360** features and interfaces can be amplified by inserting a 16 port Switch board in the “SWC” slot which can be found on the device rear panel. In order to correctly insert the board, please follow the steps given below.

- (1) Switch off the device and remove the data cables (as described in the section on connection in this manual).
- (2) Using a screwdriver, remove the cover over the “SWC” spot. This cover is located on the rear panel.
- (3) Should there be a “dummy” board installed, remove it.
- (4) Insert the 16 port switch board. This operation must be carefully carried out without forcing any piece or part of the device.
- (5) Screw down the board. Firmly tighten the screws without damaging the board.
- (6) Connect and switch on the device as explained in the connection section. Should you detect any problems, switch off the device and make sure that the above steps have been carried out correctly. If the problem persists, please contact your usual supplier.
- (7) Connect a terminal to the console and check that the device detects the Switch board.

```
*****
***** Router Teldat *****
*****

BIOS CODE DUMP.....
BIOS DATA DUMP....
End of BIOS dump
  Boot-stack used: 0x000007A0
  Boot-stack free: 0x00001860

=====
          BIOS TELDAT                      (c) Teldat
=====

FLASH BIOS CODE VERSION: 01.04  Nov 26 2007 12:29:48  L1
Current date: Jan 10 2008, Thursday Current time: 18:09:50

System Info:
PCB:0x083  GPPORCR:0x0BFFFFFF  PVR:0x80210020  SVR:0x80390020
CLKs(KHz): CPU=983040  DDR=196608  LBUS=49152  PCI1=65536  PCI2=65536
Watchdog: Disabled
MMU Mode: Dynamic
ICache: ON; DCache: ON Write-Back; L2Cache: ON

Mem Info:
DRAM size: 256 Megabytes
  BANK 0: 256 Megabytes (detected)
FLASH: 64 Mb.
NVRAM: 128 Kb.
EEPROM: 2048 Bytes.

Devices:
GIGABIT ETHERNET 1
GIGABIT ETHERNET 2
SWITCH 10/100
SECURITY ENGINE
```



```
PCI device: PowerPC processor, Host
  (Bus: 0, Device: 0, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)
PCI device: PowerPC processor, Host
  (Bus: 10, Device: 0, Function: 0)
  (Subs. Vendor: 0x0000, Subs. Device: 0x0000)

Current production date: 07 16
Current software license: 15 48
Current serial number: 547/00169
BIOS MAC Add: 00-a0-26-80-80-a9
>>
.....
..
TRYING APP CODE DUMP
  (CONFIGURED) atlas3g.bin ver.: 0.10.7.12 0.0.0.0 .....
.....
.....
.....
APP DATA DUMP.....
  Bios-stack used: 0x1588
  Bios-stack free: 0x2A78
  Aux-stack used: 0x18C
  Aux-stack free: 0x1E74
Running application
Flash configuration read
Parsing text mode configuration ...
Configuration parsed
Initializing

Press any key to get started
```

## Appendix A Technical Information

### A.1 Troubleshooting

Below, you will find a table that will help you solve problems during the installation of the device. If you cannot solve the problem, please ask your distributor for additional information.

Symptom	Solution
None of the LEDs lights up on the device.	<p>Check the power supply to the device (power source, ON/OFF switch, main power outlet).</p> <p>Check that all the micro-switches are in the OFF position.</p>
The local console does not respond.	<p>Check that you are using the correct console cable and that this is connected to the device and the asynchronous terminal.</p> <p>Check that the terminal has the correct port configured.</p> <p>Check that the terminal configuration is 9600 8N1. Check that the console is not in an events process. Check that the device is not being remotely accessed via telnet.</p>
The local console is only displaying garbage.	<p>Check that the terminal has the correct port configured.</p> <p>Check that the terminal configuration is 9600 8N1.</p>
The device does not initialize and the console displays the WARM-UP text.	<p>Check that micro-switch '1' is in the OFF position. In this situation, you may have to reload the device BIOS and the routing application.</p>
The device is very slow in displaying the application prompt.	<p>Check that micro-switch '3' is in the OFF position.</p>
You have forgotten the password to access the device.	<p>Ignore the configuration through micro-switch '5' as explained in the section on micro-switches.</p>
The LEDs indicate the GE interfaces are established but there is no connectivity at the data layer.	<p>Check the configuration (routes, IP addresses, etc).</p>

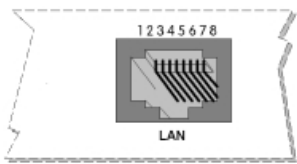
### A.2 Updating the software

The **ATLAS X60** router can be updated to new releases. Please contact your distributor for further details on new releases.

The software required to update Teldat routers is supplied in a format known as **distribution**. This consists of a single file which contains all the files needed to update your device, as well as in-depth information on the contents of the files.

### A.3 Connectors

### A.3.1 LAN (GE x) Connector

RJ45 LAN	RJ45 PIN	FE Signals	GE Signal
	1	BI-DA+	BI-DA+
	2	BI-DA-	BI-DA-
	3	BI-DB+	BI-DB+
	4	--	BI-DC+
	5	--	BI-DC-
	6	BI-DB-	BI-DB-
	7	--	BI-DD+
	8	--	BI-DD-

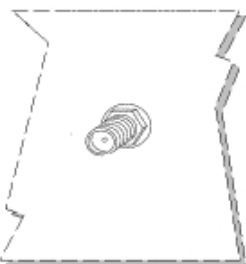
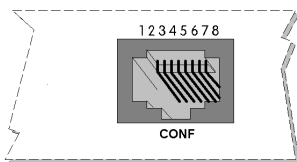


#### Note

The Ethernet connectors are equipped with the MDI-X autodetection feature and autopolarity. Behavior is full-duplex. A null HUB cable is not required to connect to another Ethernet interface.

#### NOTE:

### A.3.2 Configuration Connector

	PIN	ANT
	Internal	RF in/out
	External	GND
RJ45 CONFIGURATION	RJ45 PIN	CONF
	1	--
	2	RxD
	3	GND
	4	--
	5	--
	6	GND
	7	TxD
	8	--

## A.4 Technical Specifications

#### Hardware Architecture

PROCESSORS	Motorola PowerPC MPC8548
------------	--------------------------

MEMORY	128/640 Mbytes in SDRAM
STORAGE UNIT	FLASH Memory (16/64Mbytes) EEPROM 2 Kbytes, NVRAM 128 Kbytes

**LAN Interface\***

PROTOCOLS	Ethernet (802.3)
N° PORTS	2
SPEED	10/100/1000 Mbps (BaseT) 1000 (Base X) (ATLAS360 only)
CONNECTOR	Female RJ45 (ATLAS160/260) Dual, RJ45 female. SFP (ATLAS360 only)
CABLE	STP (Length < 3m) Optic Fiber

\* Depending on the model

**Wireless LAN Interface\***

STANDARDS	Please see the manual on Wireless LAN
SPEED	Please see the manual on Wireless LAN
CONNECTOR	2 RF

\* Depending on the model

**Configuration Interface**

LOCAL TERMINAL	V.24 9.600-8-N-1-without flow control.
CONNECTOR	RJ45 female, on the rear panel of the device.

**ATLAS 360 Power Supply**

INPUT VOLTAGE	100-240 V AC
INPUT CURRENT	1 A
INPUT FREQUENCY	50-60 Hz
MAXIMUM POWER	100 VA

**ATLAS 160 and ATLAS 260 Power Supply**

INPUT VOLTAGE	100-240V AC
INPUT CURRENT	1 A
INPUT FREQUENCY	50-60 Hz
MAXIMUM POWER	100 VA

**ATLAS 360 Dimensions and Weight**

TYPE	Box to be assembled in a 1U high Rack
LENGTH x WIDTH x HEIGHT	483 with rackmount bracket x 395 x 44 mm 444 without rackmount bracket x 395 x 44 mm
WEIGHT	4.0 kg

#### ATLAS 160 and ATLAS 260 Dimensions and Weight

TYPE	Box to be assembled in a 1U high Rack
LENGTH x WIDTH x HEIGHT	483 with rackmount bracket x 272 x 44 mm 444 without rackmount bracket x 272 x 44 mm
WEIGHT	3,250 kg

#### Environmental Specifications

AMBIENT TEMPERATURE	ON: 5° to 45 °C. OFF: -20° to 60 °C
RELATIVE HUMIDITY	ON: 8 % to 85 %. OFF: 5 % to 90 %.

## Appendix B Safety information

### B.1 Recycling and the Environment





Please do not, under any circumstances, throw away any **ATLAS X60** with normal domestic waste. Ask your local town hall for information on how to correctly dispose of them in order to protect the environment against e-waste. Always respect the current laws regarding waste material. Anyone found violating the environmental laws will be subject to fines and any additional steps established by law.

All the packing materials i.e. the cardboard box, plastic and any other packaging, together with the pieces making up an **ATLAS X60** , must be recycled complying with the current active laws regarding recycling materials.

The below symbol with a cross over the rubbish container can be seen on the device. This means that, when a device reaches the end of its life, it must be taken to the official recycling/disposal centers where it must be disposed of in an environmentally responsible manner and separately from normal domestic waste.



## B.2 Translated Safety Warnings

	<p>The equipment is intended to be installed by Service Personnel and only handled by qualified personnel. If not, the device may be damaged and malfunction.</p>
	<p>El equipo está diseñado para ser instalado por personal del servicio técnico y su manejo debe realizarlo personal cualificado. De lo contrario, el equipo puede resultar dañado y quedar inservible.</p>
	<p>This device contains elements that are sensitive to electrostatic surges and shocks. Therefore, it is essential when handling the equipment that an antistatic wriststrap is connected to the device chassis and that this is placed on an antistatic mat. Furthermore, it is crucial to avoid any kind of contact between the device components and necklaces, bracelets, rings, ties, etc.</p>
	<p>Este equipo contiene componentes sensibles a las sobrecargas y descargas electroestáticas. Por eso, durante la manipulación del equipo, utilice una pulsera antiestática conectada al chasis del equipo y colóquelo sobre una esterilla antiestática. Evite también el contacto de colgantes, pulseras, anillos, corbatas, etc. con cualquier componente del equipo.</p>
	<p>The electric current in power cables, telephone lines and communication cables is dangerous. To prevent electric shocks, before installing, handling or opening the equipment covers, connect and disconnect the cables following the steps set forth in <a href="#">Connections</a> on page 3.</p>
	<p>La tensión eléctrica de los cables de alimentación, de los cables de la línea telefónica y de los cables de comunicación es peligrosa. Para evitar descargas, antes de instalar, mover o abrir las cubiertas de este equipo, conecte y desconecte los cables siguiendo el orden que se detalla en el apartado "Conexiones".</p>
	<p>All interconnected communication devices should be plugged to THE SAME GROUNDED POWER OUTLET, which should at the same time be of good quality (lower than 10 ohms).</p> <p>Whether the workplace is provided with an uninterrupted power supply system (UPS), regulated supply or it is independent from the rest (such as lighting, etc.); it is highly recommended that all data devices should be connected to the same power source. This will avoid operating and premature aging problems of drivers and other components.</p>
	<p>Todos los equipos de comunicaciones interconectados deberán estar unidos a UNA MISMA TOMA DE TIERRA, a ser posible de buena calidad (inferior a 10 ohmios).</p> <p>Si la instalación está dotada de un Sistema de Alimentación Ininterrumpida (SAI), alimentación estabilizada, o bien es independiente del resto (alumbrado, etc.), conecte todos los equipos de comunicaciones a la misma fuente de alimentación. Así, se ahorrará problemas de funcionamiento y envejecimiento prematuro de drivers y demás componentes.</p>