



## PMC 2 BRI Expansion card

Teldat-Dm 607-I

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## **Legal Notice**

### **Warranty**

This publication is subject to change.

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

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## Chapter 1 About This Guide

This installation guide contains the step by step instructions that you need to follow in order to correctly install, un-install and replace the PMC-2ISDN expansion card in the ATLAS router family.

### 1.1 Supported Devices

The information contained in this installation guide only applies to the PMC-2ISDN expansion card.

### 1.2 Warnings and notes

Observe the warnings and instructions given in this manual to avoid and prevent injuries or damage during installation and maintenance. Please follow the security procedures and guidelines when working near electrical equipment. The warnings and notes are provided in each chapter as appropriate.

### 1.3 Who should read this manual?

This manual should be read by installers and network administrators who need to install, configure or maintain networks. This guide assumes that the installer is familiar with network electronics and technologies.

### 1.4 What is in this manual?

This installation guide contains the following information:

- A description of the general characteristics of the PMC-2ISDN expansion card.
- A description of the steps to carry out to install the PMC-2ISDN card in the ATLAS routers.
- A description of the PMC-2ISDN expansion card LEDs and the pinouts for their connectors.

### 1.5 How is the information organized?

This document aims to provide all the information necessary for installing the PMC-2 ISDN expansion card in the ATLAS router family.

- PMC-2 ISDN expansion card characteristics.
- PMC-2 ISDN expansion card connectors.
- Requirements prior to installation.
- Installing the PMC-2 ISDN expansion card.

### 1.6 Technical Support

Teldat SA offers a technical support service.

Contact information:

Web: <http://www.teldat.com>

Tel.: +34 918 076 565

Fax: +34 918 076 566

Email: [support@teldat.com](mailto:support@teldat.com)

## 1.7 Related documentation

Teldat-Dm729-I *ISDN BRI Interface*.

ATLAS router family installation manuals

Teldat-Dm605-I *PMC Expansion Cards ATLAS 60 Installation*.

**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 information guidelines only. Some small modifications may exist in the actual device.**

## Chapter 2 PMC-2 ISDN expansion card

The PMC ISDN Basic or BRI (“*Basic Rate Interface*”) expansion card allows you to manage an ISDN basic access that includes a D channel and two B channels.

Channel D is generally used to send signaling messages for call establishment and release. The B channels are used for data transmission from other protocols.

The PMC BRI expansion card ensures access to ISDN for data transmission over B channels, supporting various protocols in these.

For further information on ISDN BRI interfaces, please see manual “*Teldat-Dm729-I ISDN BRI Interface*”.



Fig. 1: PMC-2ISND Card



Fig. 2: PMC-2ISND Card, Review 2

### 2.1 PMC-2 ISDN expansion card: Characteristics

The main characteristics of the PMC-2 ISDN expansion card are as follows:

**Table 1. PMC-2 ISDN Card: Characteristics**

Ports	2 ISDN ports for data transmission
Operating Modes	TE (connection to ISDN lines)
Multilink PPP	Up to 4 B channels
Speed	256 Kbps with Multilink PPP

### 2.2 PMC-2 ISDN expansion card: Connectors

Figure 3 shows the front board of the PMC-2 ISDN card:

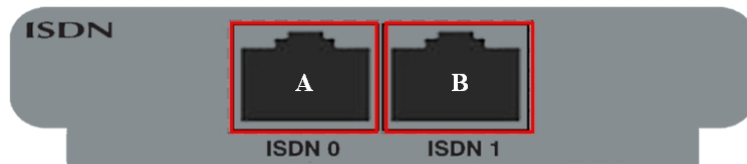


Fig. 3: Front of the PMC-2 ISDN Card

The front board elements are as follows:

**Table 2. Elements Table for the Front of the PMC-2 ISDN Card**

Item	Description
A	ISDN 0: RJ-45 ISDN basic access connector for data transmission.
B	ISDN 1: RJ-45 ISDN basic access connector for data transmission.

## 2.3 PMC-2 ISDN expansion card terminal impedance selectors

Figure 4 shows where you can find the terminal impedance selectors for the PMC-2 ISDN card's S buses.

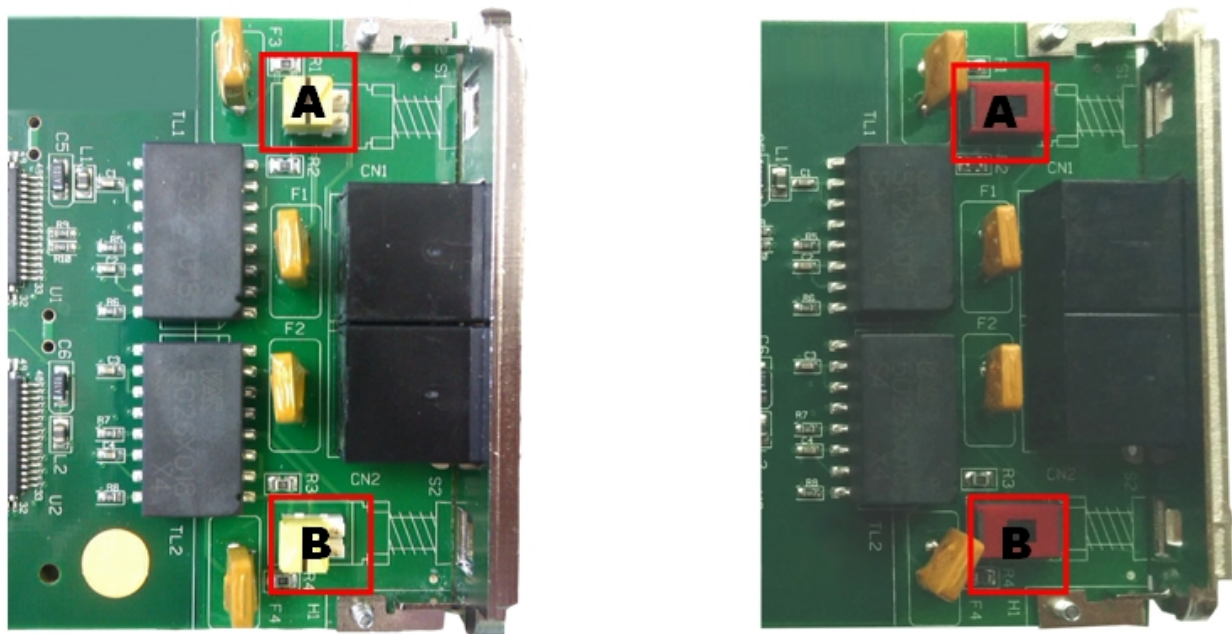


Fig. 4: Terminal Impedance Selectors

**Table 3. Impedance Selectors Elements Table**

Item	Description
A	Terminal impedance selector for the ISDN 1 connector.
B	Terminal impedance selector for the ISDN 0 connector.

The terminal impedance selectors leave the factory (factory settings) in the "ON" position (terminal connected to the bus).

The connected terminal position (ON) is the position of the impedance selectors shown in Figure 4. If you wish to disconnect the terminal impedance (OFF), slide them to the right, as shown in Figure 5



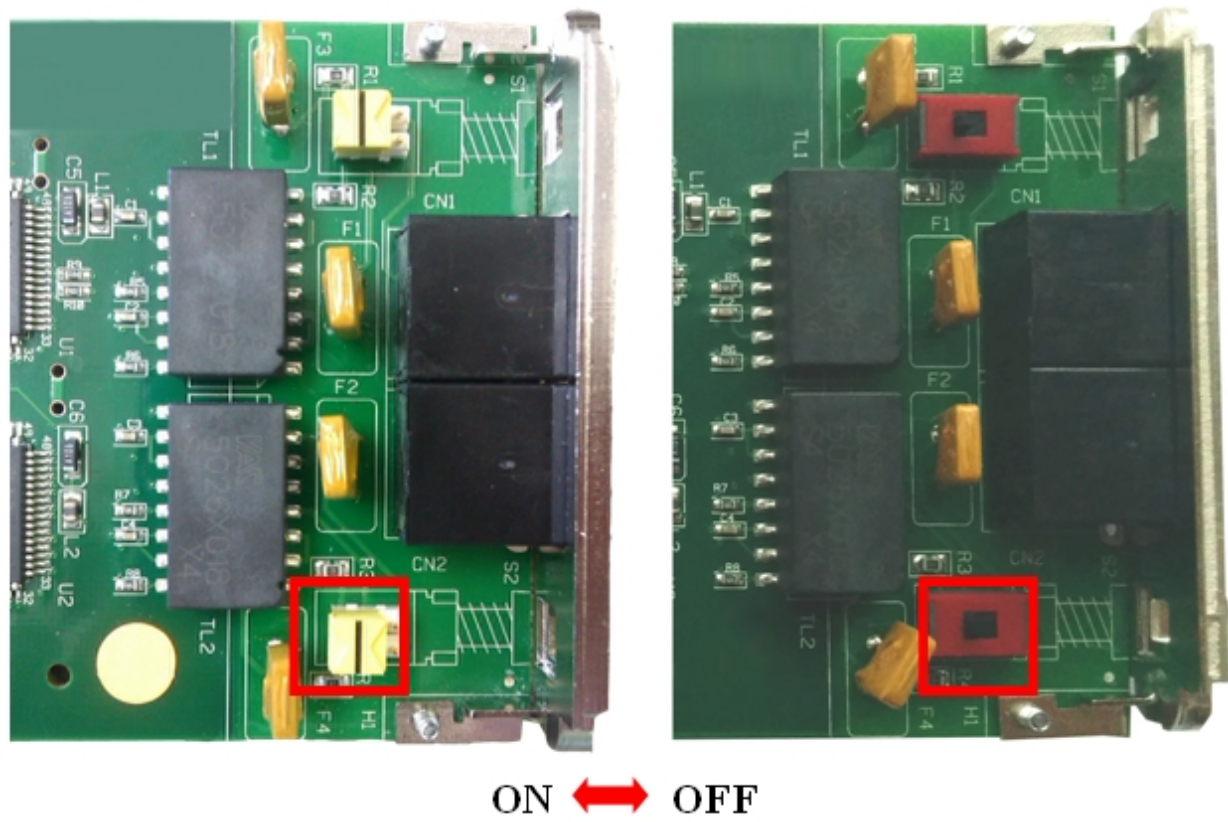


Fig. 5: Connecting/Disconnecting the Terminal Impedance

## Chapter 3 Installing the PMC-2 ISDN expansion card

This chapter provides information on how to install and uninstall the PMC-2 ISDN expansion card in the ATLAS routers.

This information includes:

- Requirements prior to installation.
- Installing or replacing a PMC-2 ISDN expansion card.

### 3.1 Requirements prior to installation

In order to configure the card, you must have access to the ATLAS router through a console or a Telnet connection. For further information, please see the section on “Connecting for configuration” found in the ATLAS router family installation manuals.

### 3.2 Installing or replacing the PMC-2 ISDN expansion card

To install or replace a PMC-2 ISDN card, please see the PMC cards installation generic manual corresponding to the ATLAS router model where the installation is being carried out.

## Chapter 4 LEDs and connector Pinouts: Description

This chapter provides information on the PMC-2 ISDN expansion card LEDs and the pinouts for its connector.

### 4.1 PMC-2 ISDN expansion card with bypass: LEDs

The PMC-2 ISDN expansion card doesn't have any LEDs of its own.

### 4.2 Connector Pinouts

The PMC-2 ISDN expansion card has two RJ-45 connectors:

#### 4.2.1 RJ-45 Connector

Figure 6 shows the PMC-2 ISDN expansion card RJ-45 connector pinouts. Both connectors are the same, consequently only one image is shown:

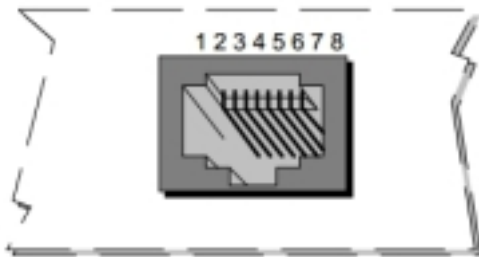


Fig. 6: RJ-45 Connector Pinouts

Table 4 shows the information associated to each connector pinout:

#### RJ-45 connector Pinouts

RJ-45 pinouts	Signal
1	--
2	--
3	Tx+
4	Rx+
5	Rx-
6	Tx-
7	--
8	--

We recommend that you use a 26 AWG cable, at the very least. This may be supplied with the card itself or be described in the safety instructions.




#### Warning

To reduce the risk of fire, only use a 26 AWG cable or a cable with a larger diameter.

## Appendix A Regulatory compliance and safety information

### A.1 Translated Safety Warnings

	To reduce the risk of fire, only use a 26 AWG cable or a cable with a larger diameter.
	Чтобы снизить риск воспламенения, используйте только кабель 26 AWG или кабель большего диаметра.
	Pour réduire le risque d'incendie, utilisez uniquement un câble 26 AWG ou de diamètre plus grand.
	Para reducir el riesgo de incendio, utilice sólo un cable 26 AWG o de un diámetro mayor.

## A.2 Compliance

### A.2.1 FCC Statement

#### A.2.1.1 Federal Communications Commission Interference

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

### A.2.2 IC Statement

#### A.2.2.1 CAN ICES-3 (A)/NMB-3(A)

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.

*Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par le ministère des Communications.*