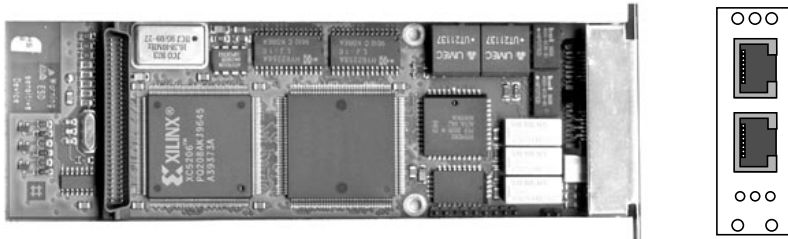


# RELEASE NOTE BIANCA/CM-PRI

April 7, 1997

## S<sub>2M</sub> Primary Rate Communications Module: *Release 2.1*

This document describes release 2.1 of the BIANCA/CM-PRI S<sub>2M</sub> Primary Rate Interface (PRI) Communications Module and is provided as a supplement to your existing documentation.



### Enhancements / New Features

In addition to major performance improvements in connection with driver enhancements made to the BRICK's system software, release 2.1 includes a second OUT port which can be used with internal relays for PRI Circuit Switching. This allows a connected PMX line to be automatically switched over to a backup router if the BRICK is powered down. In addition, the BIANCA/CM-PRI is prepared to work with BinTec's modem modules.

**Note:** BIANCA/CM-PRI Ver. 2.1 is backward compatible with all BRICK-XM and BRICK-XLs. However, to take full advantage of the improved performance features software version 4.4 Rev. 2 (BRICK-XM) and 4.3 Rev. 21 (BRICK-XL) are required.



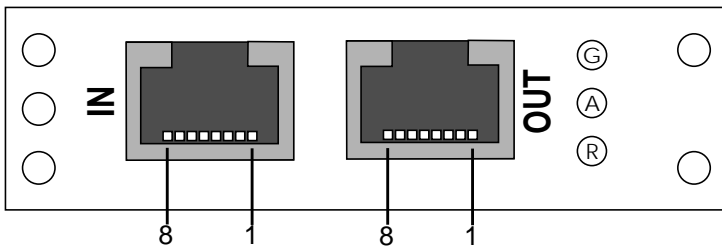
## Technical Data

As in previous versions BIANCA/CM-PRI supports one D-channel for signalling and up to 30 B-channels for data transfer. Three LEDs are included on the back plane which indicate the following:

BIANCA/CM-PRI back plane LEDs:

Colour	State	Meaning
Green	On	Layer 1 of ISDN connection is stable
Amber	On	D channel currently in use, protocol stack is loaded.
Red	On	One or more B channels are in use.

Two UTP (Unshielded Twisted Pair) ports, marked IN and OUT respectively, provide for connection to an approved primary rate interface and a backup router.

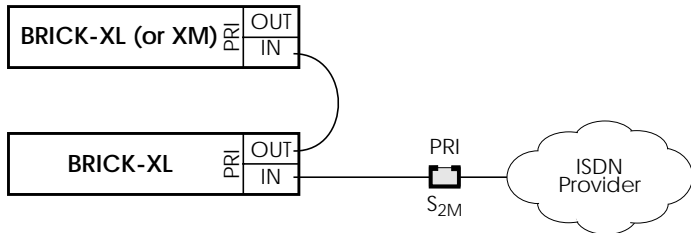


The pin assignments for the IN and OUT ports of the BIANCA/CM-PRI S<sub>2M</sub> adapter are as follows:

Pin	Function	Normal marking on NT
1	Receive, NT to TE (+)	S2Mab/a
2	Receive, NT to TE (-)	S2Mab/b
4	Transmit, TE to NT (+)	S2Man/a
5	Transmit, TE to NT (-)	S2Man/b
3,6-8	Not used	

### PRI Circuit Switching

As long as the BRICK is receiving power all traffic received from the IN port is processed locally. However, if power fails, the BRICK automatically redirects signals from pin 1, 2, 4 and 5 of the IN port to pins 1, 2, 4 and 5 of the OUT port using internal relays.



To setup a backup router for the PRI line, connect a standard RJ-11 cable (do not use a 10base-T ethernet or crossover cable) between the BIANCA/CM-PRI's OUT port and the secondary router.

**Note:** Note that only devices that are approved for connection to the public ISDN network in your country may be connected to the BIANCA/CM-PRI's OUT port.



**Note: Installing an NT (Network Terminator)**



For the installation of an NT for the PMX, it is advisable to install an appropriate main-socket with the above mentioned pin assignments for send and receive lines. This will allow for an easy connection of the BRICK with a BIANCA/CM-PRI module using the included cable. Additionally, note that for the NT, a separate voltage supply (60V) needs to be installed. The company that installs your NT should be informed that this voltage supply needs to be installed separately and is not being provided for by the connected end devices (usually a PBX for S2M interfaces).

## Special Note for NTs in Germany

In Germany, the send lines (NT->TE) on the connector block are often marked with S2Mab (a and b), and the receive lines (TE->NT) with S2Man (a and b).

On the NT itself, there are usually several LEDs provided for displaying various status conditions. The following indicators and their meanings seem to be somewhat standardized. In doubt, please refer to the operators manual for your NT.

- LED1    Color:    green  
          Marked:    “NT”  
          Meaning: LED-on normally means that the proper voltage is being supplied.
- LED2    Color:    red  
          Marked:    “UK2”  
          Meaning: LED-on (or blinking) normally means that the S<sub>2M</sub> interface has not been activated at the switching station. In such cases, you will have to contact you local telephone company to have the interface activated.
- LED3    Color:    red  
          Marked:    “S2M”  
          Meaning: LED-on normally means that signals are not being received from the end device.

## Approvals

The BIANCA/CM-PRI ISDN S<sub>2M</sub> Primary Rate Interface (PRI) Communications Module has been approved for use within the European Community and Norway.



