

RMC – B1 REMOTE I/O MODULE WITH CANOPEN AND MODBUS INTERFACE

General Properties

LYNCA-RMC-B1 is a general purpose remote I/O module that is used as a remote I/O module for various applications such as the I/O interface module of a CNC controller, the I/O extension module of an RTU, or simply as a remote RF data signal transmission unit.

LYNCA-RMC-B1 provides the following I/O resources:

2 x independent CanBus Port

1 Mhz CanOpen support

1 x RS-232 / RS-485 Modbus

with Modbus Protocol

32 x Digital Input

9-30VDC inputs
Optoisolation
Isolated by group of 8

32 x Digital Output with status leds

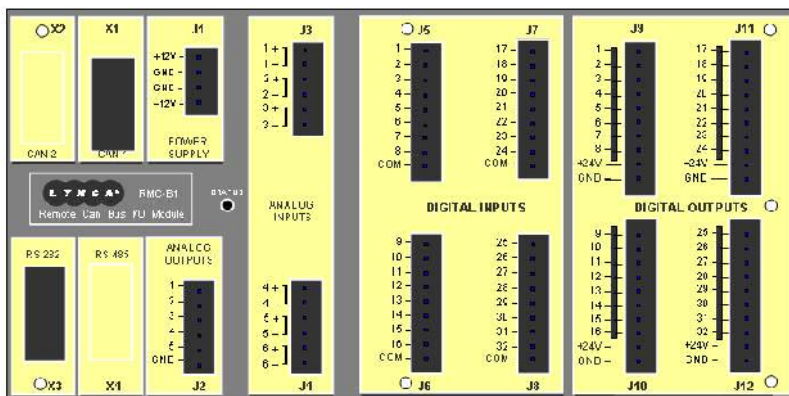
Source or sink mode,
Optoisolation
Isolated by group of 8

6 x Analog Inputs

	Input range	Resolution
AIN 1	0-10 V	10 bits
AIN 2	0-5 V	10 bits
AIN 3	0-20mA	10 bits
AIN 4	0-10 V	10 bits
AIN 5	0-5 V	10 bits
AIN 6	0-20mA	10 bits

5 x Analog Outputs

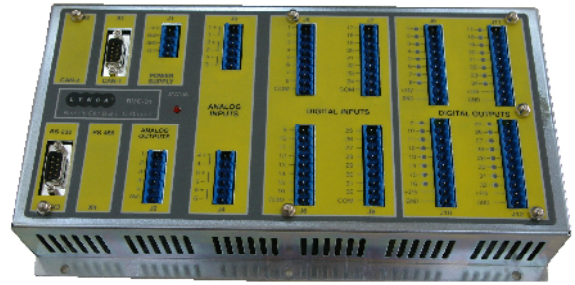
	Input range	Resolution
AOUT 1	-10V .. +10V	10 bits
AOUT 2	0-10V	10 bits
AOUT 3	-10V .. +10V	10 bits
AOUT 4	0-10 V	8 bits
AOUT 5	0-10 V	8 bits



Configuration and Diagnosis

Via provided PC software running on Windows (R) :

- Setting communication parameters
- Access to all I/O resources from monitor



C Programming

RMC-B1 has a 16 bit microcontroller that is programmed in C language. On request, RMC-B1 may be delivered with a C programming environment to develop a particular application. RMC-B1 modules communicate between them.

Application Examples

- **I/O Interface Unit For Machine Control**

Industrial machines demanding high speed I/O interface, like a punch press or a PVC frame machine, are controlled with a single RMC-B1 module. Communication between RMC-B1 and the CNC unit is performed using CANBus.

- **I/O Extension & Protocol Conversion Unit For Modbus RTUs**

In some industrial applications, Remote Terminal Units (RTU) need flexible and programmable I/O interfaces to access an external device through a specific protocol. For such an application, it's possible to program the RMC-B1 unit to implement the specific protocol and send the data via Modbus RTU or Canbus interface to a central unit. In addition, the built-in I/O resources of the RMC-B1 make of it a very affordable I/O extension module.

- **Long Distance Digital I/O Transmission**

The transmission of digital I/O signals between a master and a slave station is the typical configuration of remote supervision and control applications. RMC-B1 provides very efficient and economical solution for large number of remote I/O signal transmission. In the master station, a RMC-B1 run in "Modbus Master" mode and at the remote station another RMC-B1 is used in "Modbus slave" mode.

Two radio modems make the radio connection. Point to point communication distance may reach 50 km (depending on modems and geographical conditions).

Since RMC-B1 is an intelligent unit, it's possible to program it easily to access remotely to any field equipments provided a specific protocol. RMC-B1 is used for cost effective and flexible I/O extension or protocol conversion modules for many RTU equipments in various SCADA projects.

