Monitoring & Control Start Kit

The Modbus M&C Start kit contains a USB to RS485 transiever and a
2 meter M8 cable for connection between the transceiver and a LNB or BDC with M&C option.

After connecting the USB to RS485 transceiver to a host (PC) and the M8 cable to a LNB/BDC you will be able to monitor and control the LNB/BDC. Below you can see what parameters that can be Read (R)/Write(W) from the included registers. Beside this kit you need to install a Modbus PC program to be able to monitor and control your LNB/BDC.

Features

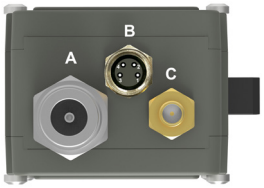
- ***Complete hardware kit to connect a PC to an SMW LNB/BDC with M&C***
- ***For setup and reading of Alarms for tropubleshooting and redundancy switching, including first input stage (LNA) current monitoring***
- ***M&C functions such as Band (LO) switching, LNB conversation gain control and more***
- ***Easy to monitoring of parameters like RF output power, Voltage, Current and more...***
- ***Standard Fieldbus RS 485 electrical and MODBUS RTU interface***

TECHNICAL SPECIFICATIONS

REGISTER	Functionality
Input Register (R)	Alarm reading, Persistant Alarm, Days of operation, IF output power, Temperatur (C or F), Current monitor, Input voltage, Laser power (if optical output), LNA current, Unit gain offset, Unit Serial number, Unit Software version.
Discrete Inputs (R)	Sum Alarm Activated or not, Active LO ref (Int/Ext), External LO ref. detected, External LO ref. locked, TTL input value, LO locked, 22 kHz detect
Coils (R/W)	Alarm pin output config, Temperature unit (Celcius or Fahrenheit), Legacy control mode (22 kHz or Modbus band switching), GPO output, GPO Mode 1, Persistant alarm reset
Holding Register (R/W)	Slave adress 1-247 (default 60), Alarm trigger settings, Band Select via Modbus, Unit gain offset, MODBUS EUSART Parity Mode (default is Even), Baud Rate selection (default is 19,2 kbps, 8 bits, 1 stop bit, Even)
Alarm register	LO locked, Ext LO ref. locked, Ext LO ref. detected, LNA failure, Output RF power low, Output power high (saturation), Total current high
Temperature range	Operating: - 40° to + 80° C
Alarm interface	Interface: Separate M8-connector (B), Open collector, Open on fault, 3.3 to 24 V, max. 200 mA
Monitoring & Control	Via MODBUS RTU RS485 electrical interface, see sep. document for details. NOTE! Mates with M8 male connector. Cable: shielded min. CAT5
Content	1pc USB to RS485 transciever with M8-female connector, 1 pc M8 cable 2 meter with male connectors

Rev.10-21-5D

LNB/BDC Rear connectors

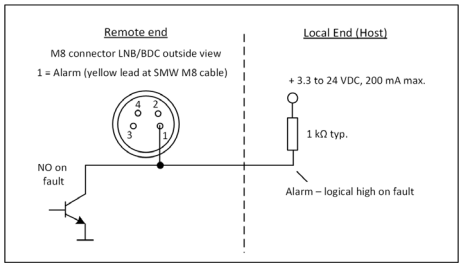


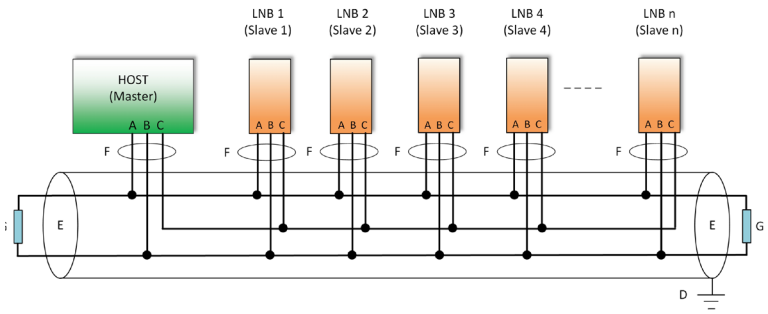
Connector B (optional)

5 SHIELD

1 = Alarm. open coll.
Not connected in USB transciever
2 = A pos+, RS485
3 = B neg-, RS485
4 = Common (GND)
5 = Shield

Alarm wiring





A & B = RS485, Tx + Rx
C = Common (ground)
D = Cable shield to ground. NOTE! Shall only be grounded at one point!
E = TP Cable (twisted pairs), max 600 meter
F = TP Cable, max 20 meter
E = 120 ohm resistor. Needed if cable E is > 30 meter

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