

5. LRM2 Configuration Concept

All LRM2 configuration and status parameters are accessible through addressable registers.

- All parameters can be read and written only in CONFIG mode.

The definition of the configuration registers is given in reference [3]. This section addresses the basic description of all these three methods.

5.1 Console Interface

The serial interface configuration port is enabled by asserting !CONFIG signal; the serial interface is automatically reconfigured in asynchronous mode, running at 38400bps, 8N1. All ASCII strings received are interpreted as configuration commands. This mode is particularly useful for stand-alone testing, when the unit can be controlled from a PC or by an operator/tester using a terminal emulation program.

5.1.1 “Write” command

wrCmd register value , where:

- wrCmd = write command. “w” or “wr” can be used and are equivalent
- register = register identification. Can use the register name or register address
- value = value to be written, in decimal or hexadecimal format. Hexadecimal values are preceded by ‘0x’

Examples:

```
wr txf 915000000 :Write 915000000 to register txf (Tx frequency)
wr 0x80 18 :Write 18 to register address 0x80
wr txf 915000000 0x80 18 :Concatenate the two writes above in a single instruction
```

Here is the command to set the transmit output power level in range 0dBm to 20dBm

```
wr txp 20 :the radio transmit power is 20+/-1.0dBm (maximum)
wr txp 10 : the radio transmit power is 10+/-1.0dBm (mid power level)
wr txp 0 : the radio transmit power is 0+/-1.0dBm (minimum)
```

5.1.2 “Read” command

rdCmd reg where:

- rdCmd= read command. **r** or **rd** can be used and are equivalent
- reg = register identification. Can use the register name or register address

Examples:

```
rd txf : Reads register txf (Tx frequency)
rd 0x80 : Reads register address 0x80
rd txf 0x80 : Reads registers txf and 0x80 in a single instruction
```