LRM003-923
Command Manual

亞太 LoRa™ Modem User's Guide

Product Description

This product is designed for ATPG' s LoRa network.

AT command

1. System Command
   The system commands start with "AAT1".

Command	Description
AAT1 Save	All parameters are saved. Response ***ok*** after parameters are saved.
AAT1 FwVersion	Show up firmware version.
AAT1 Reset	Resets and restarts the LRM003 module. Response ***ok*** after entering the command
AAT1 Restore	All parameters turn into default setting.
AAT1 SLEEP	Put LRM003 into sleep mode. Input 0xFF by UART to wake up LRM003 to leave sleep mode. Response ***ok*** after entering the command

2. Device Command
   The device commands start with "AAT1".

Command	Parameter Description
AAT2 DevAddr=?	Response: 4 bytes hexadecimal number representing the device address, from 00000000 to FFFFFFFF. This command will return present end-device address of the module.
AAT2 DevEui=?	Response: 8-byte hexadecimal number representing the device EUI. This command returns the globally unique end-device identifier, as set in the module
AAT2 reTx=[parameter1]	[parameter1]: decimal number representing the number of retransmissions for an uplink confirmed packet, from 0 to 10. Response: ***ok*** if address is valid ***invalid_param*** if parameter1 is not valid This command sets the number of retransmissions to be used for an uplink confirmed packet, if no downlink acknowledgment is received from the server.
AAT2 reTx=?	Response: decimal number representing the number of retransmissions, from 0 to 10. This command will return the currently configured number of retransmissions which are attempted for a confirmed uplink communication when no downlink response has been received.

AAT2 RxDelay1=[parameter1]	[parameter1]:decimal number representing the delay between the transmission and the first reception window in microseconds, from 100000 to 10000000. Response: ***ok*** if address is valid ***invalid_param*** if parameter1 is not valid This command will set the delay between the transmission and the first reception window to the [parameter1] in microseconds. The delay between the transmission and the second Reception window is calculated in software as the delay between the transmission and the first Reception window + 1000000 (us).
AAT2 RxDelay1=?	Response: decimal number representing the interval, in milliseconds, for rxdelay1. This command will return the interval, in microseconds, for rxdelay1.
AAT2 Tx=[parameter1], [parameter2], [parameter3]	[parameter1]: 3 [parameter2]: string representing the uplink payload type, ***uncnf*** (uncnf-unconfirmed) [parameter3]: hexadecimal value. The length of [parameter3] bytes capable of being transmitted are dependent upon the set data rate (please refer to the LoRaWAN™ Specification for further details). Response: this command may reply with two responses. The first response will be received immediately is valid (ok reply received), a second reply will be received after the end of the uplink transmission. Please refer to the the LoRaWAN™ Specification for further details. Response after entering the command: ● ok - If parameters and configurations are valid. ● Invalid_param – if parameters ([parameter1],[parameter2],[parameter3]) are not valid. ● Tx_ok - if uncnf radio tx return. ● Tx_noACK - if cnf radio tx return without ack. ● Tx_ok - if cnf radio tx return with ack ● Rx < parameter1> < parameter2>– if transmission was successful, [parameter1] port number, from 1 to 223; [parameter2]

	hexadecimal value that was received from the server.