

How to Get Downlink Commands of Milesight Sensors

Date: 2022-8-22



Description

Milesight sensors support to be configured via downlink commands, this article will describe how to get these downlink commands.

Requirement

- Milesight LoRaWAN Sensors
- Toolbox PC APP
- Document compare software: Beyond Compare 4
- Cable: TTL cable or Type-C USB cable.

Configuration

1. Connect sensor to PC, then run Toolbox on your PC. The default password is 123456.

M ilesight	ToolBox V7.0.8	∋	Θ	\otimes
	Type General Serial port COM5 Login password I Baud rate 115200 Data bits 8 Parity bits None Stop bits 1 Save Cancel			

2. Click Milesight logo multiple times on the left-up corner to enable debug log.

Milesight	ToolBox V7.0.8		Θ \otimes
	Status >		Reboot
Status General	Model: Serial Number: Device EUI: Firmware Version: Hardware Version: Join Status:	WS156-470M 6592B32341900014 24e124592b323419 01.04 1.0 Activate	
((○)) LoRaWAN Settings	RSSI/SNR: Battery: Channel Mask: Uplink Frame-counter:	-67/8 100% mmmmmmm 60 37	
습 Maintenance	Downink i fame-counter.	51	

3. All commands will be shown on the txt file, as shown:

D:/Toolbox/ToolBox_v7.0.8 (2)/ToolBox_v7.0.8/log/2022-08-19 14.57.txt	<u></u>	\times
Debug/gupphasis app:1971 \ Decu Data Size: 6 lipsl anoth: 0		
Debug (quippasit, cpp, r37,) recording 322; o interengin, o		^
Debug (compage con 1912) ====================================		
Debug:(quipbasic.cpp.1012,) "Zol/0600717o"		
Debug (auphasic cp. 1966) "Te84040057533135360000007e"		
Debug (gunphasic cpc, 1970) Rev Data Size: 13 linel enth: 0		
Debug (aunobasic op: 2067.)		
Debug (aunobasic cpc.1912) ====================================		
Debug (aunobasic con 1917) "7e040600757e"		
Debug (aunobasic con 1966) "7e8409003437304d7e"		
Debug (gunphasic con 1971) Recy Data Size: 9 linel enoth: 0		
Debug (gungbasic cpp. 2108.) pn 470M		
coold (darked or other root) by a root		
Debug (gunphasic cpp.1912.) ====================================		
Debug (gunphasic cpp 1917) "7e040600747e"		
Debug (junpbasic.cop.1966.) "7e840900303130347e"		
Debug (gunobasic.cop.1971.) Recy Data Size: 9 lineLength: 0		
Debug (gunpbasic.cop:1912,) ====================================		
Debug (gunpbasic.cpp:1917,) "7e040600737e"		
Debug:(gunpbasic.cpp:1966,) "7e840900303130307e"		
Debug (gunpbasic.cpp:1971,) Recv Data Size: 9 lineLength: 0		
Debug:(qunpbasic.cpp:1912,) ========Write====================================		
Debug:(qunpbasic.cpp:1917,) "7e040600787e"		
Debug:(qunpbasic.cpp:1966,) "7e840900303030307e"		
Debug:(qunpbasic.cpp:1971,) Recv Data Size: 9 lineLength: 0		
Debug:(qunpbasic.cpp:1912,) ========Write====================================		
Debug:(qunpbasic.cpp:1917,) "7e040600727e"		
Debug:(qunpbasic.cpp:1966,) "7e841500363539324233323334313930303031347e"		
Debug:(qunpbasic.cpp:1971,) Recv Data Size: 21 lineLength: 0		
Debug:(connectting.cpp:98,) product name pn: "WS156-470M"		
Debug:(connectting.cpp:110,) close serial port		
Debug:(toolbox.cpp:356,) product name: "WS156-470M" "01.04" "1.0" 0		
Debug:(toolbox.cpp:381,) "model_page"		
Debug:(toolbox.cpp:970,)		
Debug:(ws156dealthread.cpp:20,) Thread id: 0x8578		
Debug:(ws156dealthread.cpp:122,) request type:0		
Debug: (qunpbasic.cpp:1895,) false "COM5" "COM5"		
Debug:(qunpbasic.cpp:1912,) ========Write=========		
Debug:(qunpbasic.cpp:1917,) "/eU10b00313233343536/e"		V
LDebug:(gunpbasic.cpp:1966,) "/e81060000/e"		
24.00		

How to confirm specific command

If you want to distinguish the specific command, please refer the following steps:

1. Click the bottom button to clear the log.

):/Toolbox/ToolBox_v7.0.8 (2)/ToolBox_v7.0.8/log/2022-08-19 14.57.txt)ebug:(toolbox.cpp:52,) ToolBox Start			
	洁容		

2. Modify the corresponding configuration on Toolbox, then **save** the log as a txt file. Set disable/enable ADR mode as example.

(1) Disable ADR and click Save, then save the log as a new txt file.

D:/Toolbox/ToolBox_v7.0.8 (2)/ToolBox_v7.0.8/log/2022-08-19 14.57.txt	- 🗆 🗙	1	ToolBox V7.0.8			(∋	(
Debug pin 556saltinead copt 222, inequest types 5 Debug janghabatic copt 512, j. inequest types 5 Debug janghabatic copt 512, j. inequest 2007 COMB® Debug janghabatic copt 513, j. inequest 2008 ComB® Debug janghabatic copt 515, j. if all BoolDow 714 Debug janghabatic copt 515, j. j.	^	L	oRaWAN >					
Debug (qunphasic cpp: 197), 1 Recv Data Size: 6 Intel.negh 0 Debug (vis 156batimard, cpp: 61), 1 unv a faite faita Debug (qunphasic cpp: 197), 7 ro65100500b0824245325324197e*			Basic	Channel				
Debug (runpbasic:cpp:196), [Pr650600007e" Debug (runpbasic:cpp:197), [Proc Data Size: 6 innel.ength: 0 Debug (runpbasic:cpp:197), [Proc Data Size: 6 innel.ength: 0 Debug (runpbasic:cpp:197), "Pr651000051306242142c0002a00017e"		U.		Device EUI	24E124592B323419			
Debug (gunpbasic cpp: 1966,) "7e850600007e" Debug (gunpbasic cpp: 1971,) Bacy Data Size: 5 inel entri: 0		н.		App EUI	24E124C0002A0001			
Debug (gunpbasic.cpp:1912,) ===================================		н.		Application Port	85			
Debug (qunpbasic cpp: 1966,) "7e850600007e"		н.						
Debug (gunpbasic.cp:1971.) Recv Data Size: 6 InneLength: 0 Debug (gunpbasic.cp:1912.) ====================================				Join Type	OTAA 💽			
Debug: (gunpbasic.cpp.1917,) "7e050c00500304030201007e"		н.		Application Key				
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Debug (gunpbasic.cpp:1912.) ====================================				Spread Factor	(?) SF10-DR2 •			
Debug (qunpbasic.cpp.1966.) "7e850600007e"		ч.		Confirmed Mode	0			
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Debug (qunpbasic cpp:1971,) Recv Data Size: 6 lineLength: 0				Set the number of packets sent	32 packets			
Debug (qunbasic cpp. 1912,) "7e050900500201017e"				ADD Made	00			
Debug:(gunphasic.cp:1966,) "7e850600007e" Debug:(gunphasic.cp:1971,) Becv. Data Size: 6 incl.ength: 0				ADR MODE				
Debug (qunphasic.cpp:1912,) ========Write======				TOPower	TXPower0-19.15 dBm 💌			
Debug (cumpbasic cpp:19), "7e05000056301007e" Debug (cumpbasic cpp:196), "7e5000007e" Debug (cumpbasic cpp:197), JRev Data Size: 6 Inel.ength: 0 Debug (cumpbasic cpp:197), JRev Data Size: 6 Inel.ength: 0				Save				
清空								-

(2) Enable ADR mode and repeat Step (1).

3. Compare the two txt files, find the different command. You can click <u>here</u> to download **Beyond Compare** software and drag both files to it to find the differences easily.

Solution State	
2022/8/19 15:20:50 3,235 字节 其它一切 ¥ ANSI ¥ PC	
Debug:(qunpbaic.cpp:1917,) "7e859090505c01557e" Debug:(qunpbaic.cpp:1917,) "7e85060907e" Debug:(qunpbaic.cpp:1917,) Pecus:(bit termination of ter	
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<pre>Debug:(qunpbasic.cpp:1366,) "78580600007e" Debug:(qunpbasic.cpp:1371,) Recv Data Size: 6 lineLength: 0 Debug:(qunpbasic.cpp:1371,) "7865060007e" Debug:(qunpbasic.cpp:1371,) "7865060007e" Debug:(qunpbasic.cpp:1371,) Recv Data Size: 6 lineLength: 0 Debug:(qunpbasic.cpp:1371,) Recv Data Size: 6 lineLength: 0 Debug:(qunpbasic.cpp</pre>	
	2022/A/19 15:20:50 3:23 5 #5 HE/→ + ANSI + PC 2022/A/19 15:20:50 3:23 5 #5 HE/→ + ANSI + PC Debug: (qunpbasic.cpp:1361,) "7e659600037" Debug: (qunpbasic.cpp:1371,) * * * * * * * 5 intel.ength: 0 Debug: (qunpbasic.cpp:1371,) * * * * * * * * * * * * * * * * * *

Disable ADR: 7e050900500201007e Enable ADR: 7e050900500201017e

4. It is recommended to send the command from gateway to sensor for double check. If it works, it means the command is correct.

----End----

Milesight

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