

Netvox LoRaWAN Devicetype

DeviceType— 1 byte – Device Type of Device

0x01	—	R711
0x02	—	R311A
0x03	—	RB11E
0x04	—	R311G
0x05	—	RA07 Series
0x06	—	R311W
0x07	—	RB11E1
0x08	—	R801A
0x09	—	R726 Series
0x0A	—	RA02A
0x0B	—	R718A
0x0C	—	RA07W
0x0D	—	R727 Series(alias RA07**Y series)
0x0E	—	R809A
0x0F	—	R211
0x10	—	RB02I
0x11	—	RA02C
0x12	—	R718WB
0x13	—	R718AB
0x14	—	R718B2
0x15	—	R718CJ2
0x16	—	R718CK2
0x17	—	R718CT2
0x18	—	R718CR2
0x19	—	R718CE2
0x1A	—	R718DA
0x1B	—	R718DB
0x1C	—	R718E
0x1D	—	R718F
0x1E	—	R718G
0x1F	—	R718H
0x20	—	R718IA
0x21	—	R718J
0x22	—	R718KA
0x23	—	R718KB
0x24	—	R718LA
0x25	—	R718LB
0x26	—	R718MA
0x27	—	R718MBA

0x28—R718MC
0x29—R718N
0x2A—R718IB
0x2B—R718MBB
0x2C—R718MBC
0x2D—R7185N
0x2E—R718B4
0x2F—R718DA2
0x30—R718S
0x31—R718T
0x32—R718WA
0x33—R718WD
0x34—R718X
0x35—RA0716
0x36—R72616
0x37—R72716(alias RA0716Y series)
0x38—R718CJ4
0x39—R718CK4
0x3A—R718CT4
0x3B—R718CR4
0x3C—R718CE4
0x3D—R718DB2
0x3E—R718F2
0x3F—R718H2
0x40—R718H4
0x41—R718IA2
0x42—R718IB2
0x43—R718J2
0x44—R718KA2
0x45—R718LB2
0x46—R718WA2
0x47—R718WB2
0x48—R718T2
0x49—R718N1
0x4A—R718N3
0x4B—R311B
0x4C—R311CA
0x4D—R312A
0x4E—R311D
0x4F—R311FA
0x50—R311FB
0x51—R311FC
0x52—RA07ASeries
0x53—R726ASeries

0x54—R727A Series
0x55—R312
0x56—R311CB
0x57—R718PA Series
0x58—R718PB Series
0x59—R719
0x5A—R311WA
0x5B—R718Q
0x5C—R718IJK
0x5D—R718SA
0x5E—R728SA
0x5F—R729SA
0x60—R718R Series
0x61—R718U Series
0x62—R718S Series
0x63—R728R Series
0x64—R728U Series
0x65—R728S Series
0x66—R729R Series
0x67—R729U Series
0x68—R729S Series
0x69—R602A
0x6A—RA0716A
0x6B—R718WBA
0x6C—R311CC
0x6D—R306
0x6E—R720A
0x6F—R720B
0x70—R720C
0x71—RA10
0x72—R718PC
0x73—R816
0x74—R730IA
0x75—R730IB
0x76—R730IA2
0x77—R730IB2
0x78—R730CJ2
0x79—R730CK2
0x7A—R730CT2
0x7B—R730CR2
0x7C—R730CE2
0x7D—R730F
0x7E—R730F2
0x7F—R730H

0x80——R730H2
0x81——R730MA
0x82——R730MBA
0x83——R730MBB
0x84——R730MBC
0x85——R730WA
0x86——R730WA2
0x87——R730WB
0x88——R730WB2
0x89——R730DA
0x8A——R730DA2
0x8B——R730DB
0x8C——R730DB2
0x8D——R730LB
0x8E——R730LB2
0x8F——R718WE
0x90——R718CJ
0x91——R718CK
0x92——R718CT
0x93——R718CR
0x94——R718CE
0x95——R718B
0x96——R718PD
0x97——R718QA
0x98——R718NL1
0x99——R718NL3
0x9A——R718EA
0x9B——R718PA22
0xFF——ALL Device
Other ——Reserved

Netvox LoRaWAN Application Command V1.9.2

VersionHistory

Date	Version	Description	Note
2017-05-03	0.1	InitVersion	
2017-05-09		Add ConfigureCmd,PQOSCmd	
2017-06-07	0.2	Add R311A、RB11E、R311G Cmd	
2017-06-12	0.3	Add RA07 cmd	
2017-07-05	0.4	Add ADR Config cmd, LowBatteryIndicator	
2017-07-06	0.5	Add IRDectionTimeSupport	
2017-08-02	0.6	Add RA07 Reportcmd	
2017-08-16	0.7	Add R311W Reportcmd	
2017-08-17	0.8	Add ChangeActiveModeAndInfoCmd	
2017-08-29	0.9	Add RB11E,R801A Support	
2017-09-08	1.0	Add RA07 temp/humid/ WindSpeed/WindDirection /Atomsphere reportcmd	
2017-09-14	1.1	Add CayenneTxPeriodCmdSupport	
2017-09-19	1.2	Add resumenetworkinfocmd	
2017-10-30	1.3	Add R726 RA02A Devicetype Support	
2017-11-01	1.4	Add R718A Devicetype Support	
2017-11-29	1.5	Add 5TE Electrical Conductivity Suport in Reporttype=0x0A Add RA07W Devicetype Support	
2017-12-28	1.5.1	Add ReadLoRaWANStack Version Support	

		Add R727 DevicetypeSupport	
2018-01-13	1.5.2	Add R809A DevicetypeSupport	
2018-01-24	1.5.3	Add RB02I RA02C DevicetypeSupport	
2018-02-02	1.6	Add R718W DevicetypeSupport	
2018-03-08	1.7	Add R718X MultiDevice Support	
2018-04-12	1.7.1	Add R718MA Cmd definition Add RA07A/R726A/R727A DeviceType Support	
		Add R718MBB/R728MBC DeviceType Support	
2018-05-03	1.8	Add R718 MultiChannel DeviceType Support,such as R718B2/R718B4 etc	
2018-05-15	1.8.1	Add R311B/R311C/R312A/R311D/R311FA/R311FB/R311FC Device Support	
2018-05-28		Add RA07A/R726A/R727A Devicetype	
2018-06-08		Modify R312->R312A,Add new R312 Devicetype	
2018-06-19	1.8.2	Modify R311C->R311CA,Add new R311CB devicetype	
		Add SoilVWC CalibrateCmd	
2018-08-09	1.8.3	Add CN470 modify channel	
2018-08-20		Add R718G settingcmd	
2018-08-22		Add R718PA/R718PB Series DeviceSupport Add R719 DeviceSupport	
2018-08-28		Add R718H CmdSupport	
2018-09-05		Add R718H2 CmdSupport Add Passthrough CmdDefine	
2018-09-27		Add GlobalCalibrateCmd	
2018-10-12		Add R311WA Device Support	
2018-10-16		Extend R718N1/N3 Payload to support report when current larger than 65A	
2018-10-23		Add VOCs ReportType Support	

2018-11-09	1.8.4	Modify R718C to R712C2, R718C device type will be added in future	
		Add R718Q CmdSupport Add R718IJK CmdSupport	
2018-11-19		Add R718R/U/S CmdSupport	
2018-11-26		Add PQOS Cmd to Support SetAU915/US915 Bands and Set AS923/KR920/IN868 New default channels	
2018-11-27	1.8.5	Add R718E CmdSupport	
2018-11-29		Add R602A Cmd Support	
2018-11-30		Add RA0716A DeviceSupport	
2018-12-04		Add PQOS cmd to support modify OTA>=<ABP Add PQOS cmd to support R606A	
2018-12-11		Modify docerror according M47 Customer's Check	
2018-12-12		Modify R718E datatype from int16 to float16 type	
2018-12-18		Add R718WBA CmdSupport	
2018-12-26		Add R311CC CmdSupport	
2019-01-28	1.8.6	Add R306 Devicetype Support	
2019-02-25		Modify R718E Cmd	
2019-03-12		Add R718PC/R720A/R720B/R720C/RA10 Devicetype Support Add AS923 dwelltimeonoffsetCmdSupport Add lastmessageresenddurationSet in ContactSwichtype Modify R718G LightLevelRangesetting Add R602A MuteWaringModeCmd Support Add R718PC changebaudrateCmdSupport	
2019-03-27		Add R816 DeviceType	
2019-04-28	1.8.7	Add R730 Series include R730IA R730IB R730IA2 R730IB2 R730CX R730T2 R730T R730J R730J2 R730F R730F2 R730H R730H2 R730MA R730MBA R730MBB R730MBC R730WA R730WA2 R730WB2 R730WB R730DA R730DA2 R730DB R730DB2 R730LB	

		R730LB2	
		Add R718WE devicetype	
2019-05-08	V1.8.8	Add RB11E TimeCtrlCmd For CW11 Customer	
		Add PushButtonDevicetype(Such as R312, R312A, R718T, R718T2, RB02I (R730T,R730T2)) button's presstime config	
2019-05-14		Add R718CJ R718CK R718CT R718CR R718CE R718B devicesupport	
		Change R727 Series 's device name to the new name with RA07**Y Series,Such R72716 changeto RA0716Y ,R727001 change to RA0701Y, etc	
2019-05-27		Add R718PD devicetype support Add temperature/humid calibrate in lorawan for RA07/R726/RA07**Y/R718PA series Add RA02C alarmthreshold	
2019-06-04	V1.9	Modify doc typesetting	
2019-06-11		Add R718QA devicesupport	
		Add R718N3 Reporttype=2 for support when R718N3 detect three diffent current source such as 2A 20A 250A	
2019-06-25		Extend pushbutton presstime definition for support longer presstime	
2019-07-10	V1.9.1	Add R809A/R816 PowerOFFAlarm Support	
2019-07-30		Add R719 newcommand	
2019-07-31	V1.9.2	Add R718NL1、 R718NL3、 R718PA23 device support	

1、 ReportDataCmd(UpDirection)

FPort: 0x06

Bytes	1	1	1	Var(Fix=8 Bytes)
	Version	DeviceType	ReportType	NetvoxPayLoadData

Version– 1 bytes –0x01—the Version of NetvoxLoRaWAN Application Command Version

DeviceType– 1 byte – Device Type of Device

The devicetype is listed in Netvox LoRaWAN Application Devicetype V1.9.doc

ReportType – 1 byte –the Presentation of the NetvoxPayLoadData, according the devicetype

NetvoxPayLoadData– Fixed bytes (Fixed =8bytes)–

Device	DeviceType	Report Type	NetvoxPayLoadData				
ALL	ALL (according devicetype not FF)	0x00	SoftwareVersion(1Byte) Eg.0x0A—V1.0	HardwareVersion(1Byte)	DateCode(4Bytes, eg 0x20170503)	Reserved(2Bytes, fixed 0x00)	
R711/R718A/R718AB/R720A	0x01/0x0B/0x13/0x6E	0x01	Battery(1Byte, unit:0.1V)	Temperature(Signed 2Bytes, unit:0.01 °C)	Humidity(2Bytes, unit:0.01%)	Reserved(3Bytes, fixed 0x00)	
R720B	0x6F	0x01	Battery(1Byte, unit:0.1V)	Temperature(Signed 2Bytes, unit:0.01 °C)	Humidity(2Bytes, unit:0.01%)	Alarm (1Byte 0:off 1:on)	Reserved(2Bytes, fixed 0x00)
R718WBA	0x6B	0x01	Battery(1Byte, unit:0.1V)	Temperature(Signed 2Bytes, unit:0.01 °C)	Humidity(2Bytes, unit:0.01%)	Status (1Byte 0:off 1:on)	Reserved(2Bytes, fixed 0x00)
R718CJ/R718CK/R718CT/R718CR/R718CE/R718B	0x90/0x91/x092/0x93/0x94/0x95	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signed 2Bytes, unit:0.1 °C)	Reserved(5Bytes, fixed 0x00)		

R718CJ2/CK2/CT2/CR2/CE2/ R730CJ2/CK2/CT2/CR2/CE2	0x15/16/17/18/19 /0x78/0x79/0x7A/ 0x7B/0x7C	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signe d2Bytes,unit:0.1° C)	Temperature2(Signed2B ytes,unit:0.1° C)	Reserved(3Bytes,fixed 0x00)
R718CJ4/CK4/CR4/CE4	0x38/0x39/0x3A/0 x3B/0x3C	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signe d2Bytes,unit:0.1° C)	Temperature2(Signed2B ytes,unit:0.1° C)	Reserved(3Bytes,fixed 0x00)
		0x02	Battery(1Byte, unit:0.1V)	Temperature3(Signe d2Bytes,unit:0.1° C)	Temperature4(Signed2B ytes,unit:0.1° C)	Reserved(3Bytes,fixed 0x00)
R718B2	0x14	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signe d2Bytes,unit:0.1° C)	Temperature2(Signed 2Bytes,unit:0.1° C)	Reserved(3Bytes,fixed 0x00)
R718B4	0x2E	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signe d2Bytes,unit:0.1° C)	Temperature2(Signed 2Bytes,unit:0.1° C)	Reserved(3Bytes,fixed 0x00)
		0x02	Battery(1Byte, unit:0.1V)	Temperature3(Signe d2Bytes,unit:0.1° C)	Temperature4(Signed 2Bytes,unit:0.1° C)	
R719	0x59	0x01	Battery(1Byte, unit:0.1V)	CarOnOff(1Byte 0:off 1:on)	hidden (1Byte 0: no hidden 1: hidden)	Reserved(5Bytes,fixed 0x00)
R718DA/R718DB/R718J/ R718LB/R718MBA/R311FA/ R718Q/R730MBA/R730DA/ R730DB/R730LB/ R718QA	0x1A/0x1B/0x21/0 x25/0x27/0x4F/0x 5B/0x82/0x89/0x8 B/0x8D/0x97	0x01	Battery(1Byte, unit:0.1V)	Status(1Byte 0:off 1:on)	Reserved(6Bytes,fixed 0x00)	

R718DA2/R718DB2/R718F2/ R718J2 /R718LB2/R311CA/R311CB/ R730F2/R730DA2/R730DB2/ R730LB2	0x2F/0x3D/0x3E/0 x43/0x45/0x4C/0x 56/0x6C/0x7E/0x8 A/0x8C/0x8E	0x01	Battery(1Byte, unit:0.1V)	Status1(1Byte 0:off 1:on)	Status2(1Byte 0:off 1:on)	Reserved(5Bytes, fixed 0x00)	
R311A/R718F/R311CC/R730F	0x02/0x1D/0x6C/0 x7D	0x01	Battery(1Byte, unit:0.1V)	ContactSwitchOnOff (1Byte 0:off 1:on)	Reserved(6Bytes, fixed 0x00)		
R718G	0x1E	0x01	Battery(1Byte, unit:0.1V)	illuminance (4Bytes, unit:1Lux)	Reserved(3Bytes, fixed 0x00)		
R718E	0x1C	0x01	Battery(1Byte, unit:0.1V)	AccelerationX(Float1 6_2Bytes, m/s 2)	AccelerationY(Float1 6_2Bytes, m/s 2)	AccelerationZ(F loat16_2Bytes, m/s 2)	Reserved(1B ytes, fixed 0x00)
		0x02	VelocityX(Float1 6_2Bytes, mm/s)	VelocityY(Float16_2 Bytes, mm/s)	VelocityZ(Float16_2 Bytes, mm/s)	Temperature(Signed2Bytes, unit :0.1 ° C)	
R718IA/R718IB/R730IA/R730IB	0x20/0x2A/0x74/0 x75	0x01	Battery(1Byte, unit:0.1V)	ADCRawValue(2Byte s, unit:1mv)	Reserved(5Bytes, fixed 0x00)		
R718IA2/R718IB2/R730IA2/ R730IB2	0x41/0x42/0x76/0 x77	0x01	Battery(1Byte, unit:0.1V)	ADCRawValue1(2Byt es, unit:1mv)	ADCRawValue2(2Byt es, unit:1mv)	Reserved(3Bytes, fixed 0x00)	
R718IJK	0x5C	0x01	Battery(1Byte, unit:0.1V)	Status1(1Byte 0:off 1:on)	Current(1By tes, unit:1m A)	ADCRawValue2(2B ytes, unit:1mv)	Reserved(3Bytes, fi xed 0x00)
R718KA	0x22	0x01	Battery(1Byte, unit:0.1V)	Current(1Bytes, unit: 1mA)	Reserved(6Bytes, fixed 0x00)		
R718KA2	0x44	0x01	Battery(1Byte, unit:0.1V)	Current1(1Bytes, unit :1mA)	Current2(1Bytes, uni t:1mA)	Reserved(5Bytes, fixed 0x00)	

R718KB	0x23	0x01	Battery(1Byte, unit:0.1V)	Resistive(4Bytes,unit :1Ohms)	Reserved(3Bytes, fixed 0x00)		
R718H/R730H	0x1F/0x7F	0x01	Battery(1Byte, unit:0.1V)	PulseCount(2byte)	Reserved(5Bytes, fixed 0x00)		
R718H2/R730H2	0x3F/0x80	0x01	Battery(1Byte, unit:0.1V)	Pulse1Count(2byte)	Pulse2Count(2byte)	Reserved(3Bytes, fixed 0x00)	
RB11E/RB11E1	0x03/0x07	0x01	Battery(1Byte, unit:0.1V)	Temperature(Signed 2Bytes,unit:0.01° C)	illuminance (2Bytes,unit:1 Lux)	Occupy(1Byte 0:Un Occupy 1: Occupy)	Reserved(2Bytes, fixed 0x00)
R311G/R311B	0x04/0x4B	0x01	Battery(1Byte, unit:0.1V)	illuminance (2Bytes,unit:1Lux)	Reserved(5Bytes, fixed 0x00)		
RA07/R726/R727(alias RA07**Y series)/RA07A/R726A/R727A/R718PA/R718PB /R718R Series/ R718U Series/ R718S Series/ R728R Series/ R728U Series/ R728S Series/ R729R Series/ R729U Series/ R729S Series/	0x05/0x09/0x0D/0x52/0x53/x054/0x57/0x58/0x60/0x61/0x62/0x63/0x64 /0x65/0x66/0x67/ 0x68	0x01	Battery(1Byte, unit:0.1V)	PM1.0(2Byte ,CF=1, 1ug/m3)	PM2.5(2Byte CF=1,ug/m3)	PM10(2Byte CF=1,ug/m3)	Reserved(1Bytes, fixed 0x00)
		0x02	Battery(1Byte, unit:0.1V)	PM1.0(2Byte 1ug/m3)	PM2.5(2Byte 1ug/m3)	PM10(2Byte 1ug/m3)	Reserved(1Bytes, fixed 0x00)
		0x03	Battery(1Byte, unit:0.1V)	0.3um PM(2Byte ,1pcs)	0.5um PM(2Byte ,1pcs)	1.0um PM(2Byte ,1pcs)	Reserved(1Bytes, fixed 0x00)
		0x04	Battery(1Byte, unit:0.1V)	2.5um PM(2Byte ,1pcs)	5.0um PM(2Byte ,1pcs)	10um PM(2Byte ,1pcs)	Reserved(1Bytes, fixed 0x00)
		0x05	Battery(1Byte, unit:0.1V)	O3(2Byte ,0.1ppm)	CO(2Byte ,0.1ppm)	NO(2Byte ,0.1 ppm)	Reserved(1Bytes, fixed 0x00)
		0x06	Battery(1Byte, unit:0.1V)	NO2(2Byte ,0.1ppm)	SO2(2Byte ,0.1ppm)	H2S(2Byte ,0.1ppm)	Reserved(1Bytes, fixed 0x00)
		0x07	Battery(1Byte, unit:0.1V)	CO2(2Byte ,0.1ppm)	NH3(2Byte ,0.1ppm)	Noise(2Byte ,	Reserved(1Bytes,

			unit:0.1V)		m)	0.1db)	fixed 0x00)
		0x08	Battery(1Byte, unit:0.1V)	PH(2Byte ,0.01pH)	TemperaturewithPH(Signed 2Bytes,unit:0.01 ° C)	ORP(Signed 2Byte ,1mv)	Reserved(1Bytes, fixed 0x00)
		0x09	Battery(1Byte, unit:0.1V)	NTU(2Byte ,0.1ntu)	TemperaturewithNTU(Signed 2Bytes,unit:0.01 ° C)	EC5SoildHumidity(2Bytes,unit:0.01%)	Reserved(1Bytes, fixed 0x00)
		0x0A	Battery(1Byte, unit:0.1V)	5TESoildHumidity(2 Bytes,unit:0.01%)	5TESoildTemp(Signed 2Bytes,unit:0.01 ° C)	WaterLevel(2 Bytes,unit:1cm)	5TEEC(1Bytes, unit:0.1db/m)
		0x0B	Battery(1Byte, unit:0.1V)	TemperaturewithLDO(Signed 2Bytes,unit:0.01 ° C)	LDO'DO Value(2Bytes,unit: 0.01ppm)	LDO'Sat Value(2Bytes, unit:0.1%)	Reserved(1Bytes, fixed 0x00)
		0x0C	Battery(1Byte, unit:0.1V)	Temperature(Signed 2Bytes,unit:0.01 ° C)	Humidity(2Bytes,unit:0.01%)	WindSpeed(2 Bytes,unit:0.01m/s)	Reserved(1Bytes, fixed 0x00)
		0x0D	Battery(1Byte, unit:0.1V)	WindDirection(2Bytes)	Atomsphere(4Bytes,unit:0.01m bar)	Reserved(1Bytes, fixed 0x00)	
		0x0E	Battery(1Byte, unit:0.1V)	VOC(2Bytes,Unit:0.1 ppm)	Reserved(5Bytes, fixed 0x00)		
R311W	0x06	0x01	Battery(1Byte, unit:0.1V)	Water1Leak(1Byte 0:noleak 1:leak)	Water2Leak(1Byte 0:noleak 1:leak)	Reserved(5Bytes, fixed 0x00)	
R311WA	0x5A	0x01	Battery(1Byte,	Status1(1Byte 0:off	Status2(1Byte 0:off	Reserved(5Bytes, fixed 0x00)	

			unit:0.1V)	1:on)	1:on)		
R801A	0x08	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signed2Bytes,unit:0.01°C)	Temperature2(Signed2Bytes,unit:0.01°C)	Reserved(3Bytes, fixed 0x00)	
RA02A	0x0A	0x01	Battery(1Byte, unit:0.1V)	FireAlarm(1Byte 0:noalarm 1:alarm)	HighTempAlarm(1Byte 0:noalarm 1:alarm)	Reserved(5Bytes, fixed 0x00)	
RA07W/R718WE	0x0C/0x8E	0x01	Battery(1Byte, unit:0.1V)	WaterLeakLocation(2Bytes ,10cm)(Normal_0000,SenorNotConnected_FFFF,Other Value_LeakLocation)	Reserved(5Bytes, fixed 0x00)		
R809A/R816	0x0E/0x73	0x01	OnOff(1Byte, OFF_0x00,ON_0x01)	Energy(4Byte, unit:1wh)	OverCurrentAlarm (1Byte 0:noalarm 1:alarm)	DashCurrentAlarm(1Byte 0:noalarm 1:alarm)	PowerOffAlarm(1Bytes, 0:noalarm 1:alarm)
		0x02	Vol(2Bytes,Unit:1V)	Current(2Bytes,Unit:1ma)	Power(2Bytes,Unit:1W)		Reserved(2Bytes, fixed 0x00)
RB02I/R718T/R312A/R312	0x10/0x31/0x4D/0x55	0x01	Battery(1Byte, unit:0.1V)	Alarm(1Byte 0:noalarm 1:alarm)/Doorbell(1Byte 0:nodoorbell 1:doorbell)	Reserved(6Bytes, fixed 0x00)		
R718T2	0x48	0x01	Battery(1Byte, unit:0.1V)	Alarm1(1Byte 0:noalarm 1:alarm)	Alarm2(1Byte 0:noalarm 1:alarm)	Reserved(5Bytes, fixed 0x00)	

RA02C	0x11	0x01	Battery(1Byte, unit:0.1V)	COAlarm(1Byte 0:noalarm 1:alarm)	HighTempAlarm(1Byte 0:noalarm 1:alarm)	Reserved(5Bytes, fixed 0x00)	
R718WB/R718WA/R730WA/R730WB	0x12/0x32/0x85/0x87	0x01	Battery(1Byte, unit:0.1V)	WaterLeak (1Byte 0:noLeak1:Leak)	Reserved(6Bytes, fixed 0x00)		
R718WA2/R718WB2/R730WA2/R730WB2	0x46/0x47/0x86/0x88	0x01	Battery(1Byte, unit:0.1V)	WaterLeak 1(1Byte 0:noLeak1:Leak)	WaterLeak 2(1Byte 0:noLeak1:Leak)	Reserved(5Bytes, fixed 0x00)	
R718WD	0x33	0x01	Battery(1Byte, unit:0.1V)	TankRawData(2Bytes, Unit: 1mv)	TankLev(1Byte, Unit:1%)	Reserved(4Bytes, fixed 0x00)	
R718MA/R311D/R730MA	0x26/0x4E/0x81	0x01	Battery(1Byte, unit:0.1V)	RSSI(2Bytes, Signed Value, Unit:1dbm)	SNR(1Byte, Signed Value)	HeartInterval(2Bytes, Unit:1s)	Reserved(2Bytes, fixed 0x00)
RA0716/R72616/R72716(alias RA0716Y)/R718SA/R728SA/R729SA/RA0716A	0x35/0x36/x037/0x5D/0x5E/0x05F/0x6A	0x01	Battery(1Byte, unit:0.1V)	Temperature(Signed 2Bytes, unit:0.01 °C)	Humidity(2Bytes, unit:0.01%)	PM2.5(2Byte 1ug/m3)	Reserved(1Bytes, fixed 0x00)
R718MBB/R311FB/R730MBB	0x2B/0x50/0x83	0x01	Battery(1Byte, unit:0.1V)	WorkCount(4Bytes)		Reserved(3Bytes, fixed 0x00)	
R718MBC/R311FC/R730MBC	0x2C/0x51/0x84	0x01	Battery(1Byte, unit:0.1V)	Workdurationtime(4Bytes, unit:1s)		Reserved(3Bytes, fixed 0x00)	
R718N1	0x49	0x01	Battery(1Byte, unit:0.1V)	Current(2Bytes, Unit:1ma)	Multiplier(1Byte), the real current should convert with Current* Multiplier		Reserved(4Bytes, fixed 0x00)
R718NL1	0x98	0x01	Battery(1Byte, unit:0.1V)	Current(2Bytes, Unit:1ma)	Multiplier(1Byte), the real current should convert with Current* Multiplier		illuminance (4Bytes, unit:1Lux)
R718N3	0x4A	0x01	Battery(1Byte, unit:0.1V)	Current1(2Bytes, Unit:1ma)	Current2(2Bytes, Unit:1ma)	Current3(2Bytes, Unit:1ma)	Multiplier1(1Byte), the real current1 should convert with

						ma)	Current* Multplier
		0x02	Battery(1Byte, unit:0.1V)	Multplier2(1 Byte),the real current2 should convert with Current* Multplier	Multplier3(1 Byte),the real current3 should convert with Current* Multplier	Reserved(5Bytes, fixed 0x00)	
R718NL3	0x99	0x01	Battery(1Byte, unit:0.1V)	Current1(2Bytes, Unit:1ma)	Current2(2Bytes, Unit:1ma)	Current3(2Bytes, Unit:1ma)	Multplier1(1Byte),the real current1 should convert with Current* Multplier
		0x02	Battery(1Byte, unit:0.1V)	Multplier2(1 Byte),the real current2 should convert with Current* Multplier	Multplier3(1 Byte),the real current3 should convert with Current* Multplier	illuminance (4Bytes, unit:1Lux)	Reserved(1Byte, fixed 0x00)
R602A	0x69	0x01	Hearbeattime(2Bytes, Unit:1s)	Reserved(6Bytes, fixed 0x00)			
R720C	0x70	0x01	Battery(1Byte, unit:0.1V)	AirPressure (4Bytes, unit:0.01hPa)	Temperature(Signed2Bytes, unit:0.01 ° C)	Reserved(1Bytes, fixed 0x00)	
RA10	0x71	0x01	OnOff(1Byte,	Reserved(7Bytes, fixed 0x00)			

			OFF_0x00,ON_0x01)	
R718PA22	0x9B	0x01	Depth(2Bytes, Unit:1mm)	Temprature(2Bytes, Unit: 1°C) Reserved(4Bytes, fixed 0x00)

Battery(1Byte, unit:0.1V):Bit7 represent lowbattery Bit6-0 represent batteryvoltage

When Battery is 0x00,it repret is powered by DC/AC powersource

For RA07/R726/R727(alias RA07Y series)/R718PA/R718PB Series, when report data is all FF, it represent the sensor is disconnected**

PayLoadDecodeExample:

010B012409EA1A90000000

01—protocalversion

0B—devicetype,represent R718A

01---reporttype

24-----battery,represent 3.6v

09EA---temperature,represent 25.38°C

1A90---humidity,represent 68.00%

000000---reserveddata

010B0124FC181A90000000

01—protocalversion

0B—devicetype,represent R718A

01---reporttype

24-----battery,represent 3.6v

FC18---temperature,represent -10.00°C (must decode with signed type vaule,such int16,you also can decode by 0x1000-0x FC18=0x3E8=1000/100=-10.00 °C)

1A90---humidity,represent 68.00%

000000---reserveddata

010B019F09EA1A90000000

01---protocolversion

0B---devicetype,represent R718A

01---reporttype

9F-----battery,the bit7 is 1,represent low battery,the real batterylevel is 3.1v

09EA---temperature,represent 25.38°C

1A90---humidity,represent 68.00%

000000---reserveddata

2、 ConfigureCmd(Bi-Direction)

FPort: 0x07

Bytes	1	1	Var(Fix =9 Bytes)
	CmdID	DeviceType	NetvoxPayLoadData

CmdID– 1 bytes –

DeviceType– 1 byte – Device Type of Device

[The devicetype is listed in Netvox LoRaWAN Application Devicetype V1.9.doc](#)

NetvoxPayLoadData– var bytes (Max=9bytes)–

Description	Device	CmdID	DeviceType	NetvoxPayLoadData
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		D							
Off	R809A/R816	0x90	0x0E/0x73	Reserved (9Bytes,Fixed 0x00)					
On		0x91		Reserved (9Bytes,Fixed 0x00)					
Toggle		0x92		Reserved (9Bytes,Fixed 0x00)					
ClearEnergy		0x93		Reserved (9Bytes,Fixed 0x00)					
ConfigReportReq		0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	CurrentChange(2b yte Unit:1mA)	PowerChange (2byte Unit:1W)	Reserved (1Byte,Fixed 0x00)	
ConfigReportRsp		0x81		Status(0x00_suc cess)	Reserved (8Bytes,Fixed 0x00)				
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfig ReportRsp	0x82	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	CurrentChange (2byte Unit:1mA)	PowerChange (2byte Unit:1W)	Reserved (1Byte,Fixed 0x00)			
StartWaring	R602A	0x90	0x69	WaringMode(1byte, 0x00_FireMode, 0x01_EmergencyMode, 0x02_Burglar, 0x03_Doorbell, 0x04_MuteMode Other vaule is Reserved)	StrobeMode(1byte, 0x00_NoLedIndicatio n, 0x01_LedBlinkMode 1 in Parrel to Waring, 0x02_ LedBlinkMode2 in Parrel to Waring)	WaringDurition(2bytes,Uni t:1s)	Reserved (5Bytes,Fixed 0x00)		
ConfigReportReq		0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)			
ConfigRepo		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				

rtRsp								
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)		
Off	RA10	0x90	0x71	Reserved (9Bytes,Fixed 0x00)				
On		0x91		Reserved (9Bytes,Fixed 0x00)				
Toggle		0x92		Reserved (9Bytes,Fixed 0x00)				
ConfigReportReq		0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)		
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)		
ConfigReportReq		R718N1/ R718N3		0x01	0x49/0x4A	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	CurrentChange(2 byte Unit:1mA)
ConfigReportRsp	0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfig ReportReq	0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfig	0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)		CurrentChange(2	Reserved	

ReportRsp						byte Unit:1mA)	(3Bytes,Fixed 0x00)			
ConfigReportReq	R718NL1/R718 NL3	0x01	0x98/x099	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	CurrentChange(2 byte Unit:1mA)	Illuminancechange(2bytes Unit: 1Lux)	Reserved (1Bytes, Fixed 0x00)		
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)						
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	CurrentChange(2 byte Unit:1mA)	Illuminancechange(2bytes Unit: 1Lux)	Reserved (1Bytes, Fixed 0x00)		
SetSunlightSampleRangeReq		0x03		RangeSetting (1byte, 0x00:3~65000 lux 0x01:3~130000lux 0x02:3-220000lux)			Reserved (8Bytes,Fixed 0x00)			
SetSunlightSampleRangeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					

GetSunlight SampleRangeReq		0x04		Reserved (9Bytes,Fixed 0x00)					
GetSunlight SampleRangeRsp		0x84		RangeSetting (1byte, 0x00:3~65000 lux 0x01:3~130000lux 0x02:3~220000lux)	Reserved (8Bytes,Fixed 0x00)				
ConfigReportReq	R711/R718A/ R718AB/ R718WBA/ R720A/R720B	0x01	0x01/0x0B/ 0x13/0x6B/ 0x6E/0x6F	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.01℃)	HumidityChange (2byte Unit:0.01%)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.01℃)	HumidityChange (2byte Unit:0.01%)	
ConfigReportReq	R720C	0x01	0x70	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.01℃)	AirPressChange (2byte Unit:0.1hPa)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				

ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.01 °C)	AirPressChange (2byte Unit:0.1hPa)
ConfigReportReq	R718CJ2/CK2/CT2/CR2/CE2/R718CJ4/CK4/CT4/CR4/CE4/R730CJ2/R730CK2/R730CT2/R730CR2/R730CE2/R718CJ/R718CK/R718CT/R718CR/R718CE/R718B	0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.1 °C)	Reserved (2Bytes,Fixed 0x00)
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfig ReportReq		0x02	0x15/16/17/18/19/0x3	Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp		0x82	8/0x39/3x3A/0x3B/0x3C/0x78/0x79/0x7A/0x7B/0x7C/0x90/0x91/0x92/0x93/0x94/0x95	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.1 °C)	Reserved (2Bytes,Fixed 0x00)
SetThermocoupleTypeReq		0x03		ThermocoupleType(1Byte,0x00_Jtype 0x01_Ktype,0x02_Ttype,0x03_Rtype,0x04_Etype)			Reserved (8Bytes,Fixed 0x00)	
SetThermocoupleTypeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
GetThermocoupleTypeReq		0x04		Reserved (9Bytes,Fixed 0x00)				
GetThermocoupleTypeRsp		0x84		ThermocoupleType(1Byte,0x00_Jtype			Reserved (8Bytes,Fixed 0x00)	

coupleType Rsp				0x01_Ktype,0x02_Ttyep,0x03_Rtype,0x04_Etype)					
SetR718MB TypeReq	R718MBA/ R718MBB/ R718MBC/ R730MBA/ R730MBB/ R730MBC	0x03	0x27/0x2B/ 0x2C/0x82/ 0x83/0x84	R718MBType(1Bytes,0x01_R718MBA,0x02_R 718MBB,0x03_R718MBC)		Reserved (8Bytes,Fixed 0x00)			
SetR718MB TypeRsp		0x83		Status(0x00_success)		Reserved (8Bytes,Fixed 0x00)			
GetR718MB TypeReq		0x04		Reserved (9Bytes,Fixed 0x00)					
GetR718MB TypeRsp		0x84		R718MBType(1Bytes,0x01_R718MBA,0x02_R718MBB,0 x03_R718MBC)		Reserved (8Bytes,Fixed 0x00)			
SetActiveTh resholdReq		0x05		Threshold(2Bytes)	Deactivetime(1Byte,Unit:1s)	Reserved (6Bytes,Fixed 0x00)			
SetActiveTh resholdRsp		0x85		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
GetActiveT hresholdRe q		0x06		Reserved (9Bytes,Fixed 0x00)					
GetActiveT hresholdRs p		0x86		Threshold(2Bytes)	Deactivetime(1Byte,Unit:1s)	Reserved (6Bytes,Fixed 0x00)			
ConfigRepo rtReq	R718E	0x01	0x1C	MinTime(2bytes Unit:s)	MaxTime (2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	AccelerationChange(2byte Unit:m/s2)	Reserved (2Bytes,Fixe d 0x00)	
ConfigRepo		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				

rtRsp						
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)		
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	
				BatteryChange(1byte Unit:0.1v)	AccelerationChange(2byte Unit:m/s2)	
				Reserved (2Bytes,Fixed 0x00)		
SetActiveThresholdReq		0x03		ActiveThreshold(2Bytes)	InActiveThreshold(2Bytes)	
				Reserved (5Bytes,Fixed 0x00)		
SetActiveThresholdRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)	
GetActiveThresholdReq		0x04		Reserved (9Bytes,Fixed 0x00)		
GetActiveThresholdRsp		0x84		Threshold(2Bytes)	InActiveThreshold(2Bytes)	
				Reserved (5Bytes,Fixed 0x00)		
SetR311FTypeReq	R311FA/ R311FB/ R311FC	0x03	0x4F0x50/0x51	R311FType(1Bytes,0x01_R311FA,0x02_R311FB,0x03_R311FC)	Reserved (8Bytes,Fixed 0x00)	
SetR311FTypeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)	
GetR311FTypeReq		0x04		Reserved (9Bytes,Fixed 0x00)		
GetR311FTypeRsp		0x84		R311FType(1Bytes,0x01_R311FA,0x02_R311FB,0x03_R311FC)	Reserved (8Bytes,Fixed 0x00)	
SetActiveTh		0x05		Threshold(2Bytes)	Deactivetime(1Byte,U	Reserved (6Bytes,Fixed 0x00)

resholdReq					nit:1s)				
SetActiveThresholdRsp		0x85		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
GetActiveThresholdReq		0x06		Reserved (9Bytes,Fixed 0x00)					
GetActiveThresholdRsp		0x86		Threshold(2Bytes)	Deactivetime(1Byte,Unit:1s)	Reserved (6Bytes,Fixed 0x00)			
ConfigReportReq	R718B2/ R718B4	0x01	0x14/0x2E	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.1°C)	Reserved (2Bytes,Fixed 0x00)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.1°C)	Reserved (2Bytes,Fixed 0x00)	
ConfigReportReq	R718KA/ R718KA2	0x01	0x22/0x44	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	CurrentChange(1byte Unit:1mA)	Reserved (3Bytes,Fixed 0x00)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				

ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	CurrentChange (1byte Unit: 1mA)	Reserved (3Bytes,Fixed 0x00)	
ConfigReportReq	R718IA/ R718IB/	0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	ADCRawValue Change(2byte Unit:1mV)	Reserved (2Bytes,Fixed 0x00)	
ConfigReportRsp	R718IA2/ R718IB2/	0x81	0x20/0x2A/ 0x41/0x42/	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfig ReportReq	R730IA/ R730IB/	0x02	0x74/0x75/ 0x76/0x77	Reserved (9Bytes,Fixed 0x00)					
ReadConfig ReportRsp	R730IA2/ R730IB2	0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	ADCRawValue Change (2byte Unit: 1mV)	Reserved (2Bytes,Fixed 0x00)	
ConfigReportReq		0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	ADCRawValue Change(2byte Unit:1mV)	CurrentChange(1byte Unit:1mA)	Reserved (1Bytes,Fixed 0x00)
ConfigReportRsp	R718IJK	0x81	0x5C	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte)	ADCRawValue Change (2byte)	CurrentChange(1byte)	Reserved (1Bytes,Fixed 0x00)

					Unit:0.1v)	Unit: 1mV)	Unit:1mA)	d 0x00)		
ConfigReportReq	R718WD	0x01	0x33	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TankLevelChange(1Byte,Unit:1%)	Reserved (3Bytes,Fixed 0x00)		
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)						
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TankLevelChange(1Byte,Unit:1%)	Reserved (3Bytes,Fixed 0x00)		
SetTankLevelRangeReq		0x03		MinSensorVoltage(1Byte,Unit:100mv)	MaxSensorVoltage(1Byte,Unit:100mv)	Reserved (7Bytes,Fixed 0x00)				
SetTankLevelRangeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					
GetTankLevelRangeReq		0x04		Reserved (9Bytes,Fixed 0x00)						
GetTankLevelRangeRsp		0x84		MinSensorVoltage (1Byte,Unit:100mv)	MaxSensorVoltage (1Byte,Unit: 100mv)	Reserved (7Bytes,Fixed 0x00)				
ConfigReportReq	R311A/ R718DA/	0x01	0x02/0x1A/ 0x1B/0x21/	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte)	Reserved (4Bytes,Fixed 0x00)			

	R718DB/		0x25/0x26/			Unit:0.1v)	
ConfigReportRsp	R718J/ R718LB/	0x81	0x1D/0x27/ 0x2B/0x2C/	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
ReadConfigReportReq	R718MA/ R718F/	0x02	0x3D/0x3E/ 0x43/0x45/	Reserved (9Bytes,Fixed 0x00)			
ReadConfigReportRsp	R718MBA/ R718MBB/ R718MBC/ R718DB2/ R718F2/ R718J2/ R718LB2/ R311FA/ R311FB/ R311FC/ R311D/ R719/ R718H/ R718H2/ R730F/ R730F2/ R730H/ R730H2/ R730MA/ R730DA/ R718DA2/	0x82	0x4F/0x50/ 0x51/0x4E/ 0x59/0x1F/ 0x3F/0x7D/ 0x7E/0x7F/ 0x80/0x81/ 0x89/0x8A/ 0x8B/0x8C/ 0x8D/0x8E	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)

	R730DB/ R730DB2/ R730LB/ R730LB2						
SetDetectThresholdReq	R719	0x03	0x59	DetectThreshold(2bytes)	Reserved (7Bytes,Fixed 0x00)		
SetDetectThresholdResp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
GetDetectThresholdReq		0x04		Reserved (9Bytes,Fixed 0x00)			
GetDetectThresholdResp		0x84		DetectThreshold(2bytes)	Reserved (7Bytes,Fixed 0x00)		
SetDoubleCheckTimeReq		0x05		DoubleCheckTime(2Bytes,Unit:1s)	Reserved (7Bytes,Fixed 0x00)		
SetDoubleCheckTimeResp		0x85		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
GetDoubleCheckTimeReq		0x06		Reserved (9Bytes,Fixed 0x00)			

eq									
GetDoubleCheckTimeResponse		0x86		DoubleCheckTime(2Bytes,Unit:1s)	Reserved (7Bytes,Fixed 0x00)				
SetFilterTimeReq	R718H/ R718H2/ R730H/ R730H2	0x03	0x1F/0x3F/ 0x7F/0x80	FilterTime(1byte,Unit:5ms)	Reserved (8Bytes,Fixed 0x00)				
SetFilterTimeResp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
GetFilterTimeReq		0x04		Reserved (9Bytes,Fixed 0x00)					
GetFilterTimeResp		0x84		FilterTime(1byte,Unit:5ms)	Reserved (8Bytes,Fixed 0x00)				
ConfigReportReq	R311W/ R311CA/ R311CB/ R311CC	0x01	0x06/0x4C/ 0x56/0x6C	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		
ConfigReportResp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportResp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		
ConfigReportReq	RB02I/ R718T/	0x01	0x10/0x31/ 0x48/0x4D/	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		

ConfigReportRsp	R718T2/ R312A/ R312	0x81	0x55	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		
ConfigReportReq	R718WB/ R718WA/ R718WA2/ R718WB2/ R730WA/ R730WA2/ R730WB/ R730WB2	0x01	0x12/0x32/ 0x46/0x47/ 0x85/0x86/ 0x87/0x88	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		
ConfigReportReq	R718PA22	0x01	0x9B	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	DepthChange(2 bytes,Unit:1mm)	TemperatureChange(1byte,Unit:1℃)	Reserved (2Bytes,Fixed 0x00)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	DepthChange(2 bytes,Unit:1mm)	TemperatureChange(1byte,Unit:1℃)	Reserved (2Bytes,Fixed 0x00)	

)	°C)	0x00)	
SetMeasure TypeReq		0x03		Measuretype (1byte, 0x01_water, 0x02_gasoline, 0x03_diesel oil)	Reserved (8Bytes,Fixed 0x00)			
SetMeasure TypeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
GetMeasur eTypeReq		0x04		Reserved (9Bytes,Fixed 0x00)				
GetMeasur eTypeRsp		0x84		Measuretype (1byte, 0x01_water, 0x02_gasoline, 0x03_diesel oil)	Reserved (8Bytes,Fixed 0x00)			
ResetSens ortoFacReq		0x05		Reserved (9Bytes,Fixed 0x00)				
ResetSens ortoFacRsp		0x85		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ConfigRepo rtReq	RA02A	0x01	0x0A	MinTime(2bytes Unit:s)	MaxTime(2b ytes Unit:s)	BatteryChange(1 byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)	
ConfigRepo rtRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryC hange(1b	Reserved (4Bytes,Fixed 0x00)	

						yte Unit:0.1v)			
ConfigReportReq	RA02C	0x01	0x11	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)		
SetAlarmthresholdReq		0x03		Alarmthreshold(1byte,Unit:1ppm)	Reserved (8Bytes,Fixed 0x00)				
SetAlarmthresholdRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
GetAlarmthresholdReq		0x04		Reserved (9Bytes,Fixed 0x00)					
GetAlarmthresholdRsp		0x84		Alarmthreshold(1byte,Unit:1ppm)	Reserved (8Bytes,Fixed 0x00)				
ConfigReportReq	RA07W/ R718WE	0x01	0x0C/0x8E	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)			
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				

ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)			
SetSensorParaReq		0x03		LineLength(2Bytes,Unit:10cm)	Sensitivity(1Byte,Hihg_0x00,Mid_0x01,Low_0x02)	Reserved (6Bytes,Fixed 0x00)			
SetSensorParaRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
GetSensorParaReq		0x04		Reserved (9Bytes,Fixed 0x00)					
GetSensorParaRsp		0x84		LineLength(2Bytes,Unit:10cm)	Sensitivity(1Byte,Hihg_0x00,Mid_0x01,Low_0x02)	Reserved (6Bytes,Fixed 0x00)			
ConfigReportReq	R311WA	0x01	0x5A	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	SensorDisableTime(2 bytes Unit:s)	SensorDetectionTime(2bytes Unit:s)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
ReadReportConfigReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadReportConfigRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2 bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	SensorDisableTime(2 bytes Unit:s)	SensorDetectionTime(2bytes Unit:s)	
ConfigReportReq	RB11E/RB11E1	0x01	0x03/0x07	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte	TemperatureChange(2byte Unit:0.01℃)	illuminance (2byte	

						Unit:0.1v)		Unit: 1Lux)
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.01℃)	illuminance Change (2byte Unit: 1Lux)
SetIRDisableTimeReq		0x03		IRDisableTime(2bytes Unit:s)	IRDetectionTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)		
SetIRDisableTimeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
GetIRDisableTimeReq		0x04		Reserved (9Bytes,Fixed 0x00)				
GetIRDisableTimeRsp		0x84		IRDisableTime(2bytes Unit:s)	IRDetectionTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)		
ConfigReportReq	R718Q/R718QA	0x01	0x5B/0x79	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfig		0x02		Reserved (9Bytes,Fixed 0x00)				

ReportReq								
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime (2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)	
SetIRDisabl eTlmeReq		0x03		IRDisableTime(2bytes Unit:s)	IRDectio nTime(2b ytes Unit:s)	Reserved (7Bytes,Fixed 0x00)		
SetIRDisabl eTlmeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
GetIRDisabl eTlmeReq		0x04		Reserved (9Bytes,Fixed 0x00)				
GetIRDisabl eTlmeRsp		0x84		IRDisableTime(2bytes Unit:s)	IRDectio nTime(2bytes Unit:s)	Reserved (7Bytes,Fixed 0x00)		
ConfigRepo rtReq	R311G	0x01	0x04	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryCha nge(1byte Unit:0.1v)	Illuminancechange(2 bytes Unit: 1Lux)	Reserved (2Bytes,Fixe d 0x00)
ConfigRepo rtRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2byt es Unit:s)	BatteryChange(1byte Unit:0.1v)	Illuminancechange(2 bytes Unit: 1Lux)	Reserved (2Bytes,Fixe d 0x00)

ConfigReportReq	R311B	0x01	0x4B	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Illuminancethreshold (2bytes Unit: 1Lux)	Reserved (2Bytes,Fixed 0x00)		
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)						
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Illuminancethreshold (2bytes Unit: 1Lux)	Reserved (2Bytes,Fixed 0x00)		
ConfigReportReq	R718G	0x01	0x1E	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Illuminancechange(4bytes Unit: 1Lux)			
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)						
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Illuminancechange(4bytes Unit: 1Lux)			
SetSunlightSampleRangeReq		0x03		RangeSetting (1byte, 0x00:3~65000 lux 0x01:3~130000lux 0x02:3-220000lux)		Reserved (8Bytes,Fixed 0x00)				
SetSunlight	0x83	Status(0x00_success)		Reserved (8Bytes,Fixed 0x00)						

SampleRangeRsp								
GetSunlightSampleRangeReq		0x04		Reserved (9Bytes,Fixed 0x00)				
GetSunlightSampleRangeRsp		0x84		RangeSetting (1byte, 0x00:3~65000 lux 0x01:3~130000lux 0x02:3-220000lux)	Reserved (8Bytes,Fixed 0x00)			
ConfigReportReq	R718KB	0x01	0x23	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Resistive (4bytes Unit: 10hm)	
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Resistive (4bytes Unit: 10hm)	
ConfigReportReq	RA07 Series/ R726 Series/	0x01	0x05/0x09/ 0x0D/0x35/	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)		
ConfigReportRsp	R727 Series(alias RA07**Y series)/	0x81	0x36/0x37/ 0x52/0x53/	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfigReportReq		0x02	0x54/0x57/ 0x58/0x5D/	Reserved (9Bytes,Fixed 0x00)				

ReadConfig ReportRsp	RA0716/ R72616/R7271	0x82	0x5E/0x5F/ 0x60/0x61/ 0x62/0x63/ 0x64/0x65/ 0x66/0x67/ 0x68/0x6A	MinTime(2bytes Unit:s)		MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)
SetLDOSettingReq	6(alias RA0716Y)/ RA07A Series / R726A Series / R727A/ R718PA Series / R718PB Series /	0x03		LD O's Altitude(2bytes)	LDO's PSU(2bytes)	Reserved (5Bytes,Fixed 0x00)	
SetLDOSettingRsp	R718SA /R728SA/	0x83		Status(0x00_success)		Reserved (8Bytes,Fixed 0x00)	
GetLDOSettingReq	R729SA/ R718R Series/	0x04		Reserved (9Bytes,Fixed 0x00)			
GetLDOSettingRsp	R718U Series/ R718S Series/ R728R Series/ R728U Series/ R728S Series/ R729R Series/ R729U Series/ R729S Series/ RA0716A	0x84		LDO's Altitude(2bytes)	LDO's PSU(2bytes)	Reserved (5Bytes,Fixed 0x00)	
ORPCalibrationReq		0x05		Standard ORP(2bytes, 86mV Or 256)	Reserved (7Bytes,Fixed 0x00)		

			mv)	
ORPCalibrateRsp		0x85	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
PHCalibrateReq		0x06	StandardPH(2bytes,0PH Or 4PH Or 9PH)	Reserved (7Bytes,Fixed 0x00)
PHCalibrateRSP		0x86	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
NTUCalibrateReq		0x07	StandardNTU(2bytes,0 or fullscale*10)	Reserved (7Bytes,Fixed 0x00)
NTUCalibrateRsp		0x87	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
SetWireLen		0x08	Length(2bytes,Unit:1cm)	Reserved (7Bytes,Fixed 0x00)

gthReq				
SetWireLen gthRsp		0x88	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
GetWireLen gthReq		0x09		Reserved (9Bytes,Fixed 0x00)
GetWireLen gthRsp		0x89	Lenght(2bytes,Unit:1cm)	Reserved (7Bytes,Fixed 0x00)
SetSoilType Req		0x0A	SoilType(1byte,0x00_Mineral Soil 0x01_PottingSoil 0x02_Rockwool)	Reserved (8Bytes,Fixed 0x00)
SetSoilType Rsp		0x8A	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
GetSoilType Req		0x0B		Reserved (9Bytes,Fixed 0x00)
GetSoilType Rsp		0x8B	SoilType(1byte,0x00_Mineral Soil 0x01_PottingSoil 0x02_Rockwool)	Reserved (8Bytes,Fixed 0x00)
SoilCalibrat eReq		0x0C	WVCDelt(1byte SignedValue,Unit:1%)	Reserved (8Bytes,Fixed 0x00)
SoilCalibrat eRsp		0x8C	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
SetAckOnOf fReq	ALL(0xFF)	0x0F	ACKOnOff(1Byte 1_Ack ON 0_AckOff)	Reserved (8Bytes,Fixed 0x00)
SetAckOnOf fRsp		0x8F	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)

GetAckOnOffReq		0x0E		Reserved (9Bytes,Fixed 0x00)	
GetAckOnOffRsp		0x8E		ACKOnOff(1Byte 1_AckON 0_AckOff)	Reserved (8Bytes,Fixed 0x00)
ResetReq	ALL(0xFF)	0x0D	0xFF	Reserved (9Bytes,Fixed 0x00)	
ResetRsp		0x8D		Reserved (9Bytes,Fixed 0x00)	
SetADRONOffReq	ALL(0xFF)	0x0C	0xFF	ADRONOff(1Byte 1_ADRON 0_ADROff)	Reserved (8Bytes,Fixed 0x00)
SetADRRspRsp		0x8C		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
GetADRONOffReq		0x0B		Reserved (9Bytes,Fixed 0x00)	
GetADRRspRsp		0x8B		ADRONOff(1Byte 1_ADRON 0_ADROff)	Reserved (8Bytes,Fixed 0x00)
SetResumeNetOnOffReq	ALL(0xFF)	0x0A	0xFF	ResumeNetOnOff(1Byte 1_ResumeNetON 0_ResumeNetOff)	Reserved (8Bytes,Fixed 0x00)
SetResumeNetRsp		0x8A		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
GetResumeNetOnOffReq		0x09		Reserved (9Bytes,Fixed 0x00)	
GetResume		0x89		ResumeNetOnOff(1Byte	Reserved (8Bytes,Fixed 0x00)

NetRsp				1_ResumeNet ON 0_ResumeNetOff)			
GetLoRaWANLibVersionReq		0x08	0xFF	Reserved (9Bytes,Fixed 0x00)			
GetLoRaWANLibVersionRsp		0x88		MajorVer(1Byte)	MinorVer(1Byte)	SubVer(1Byte) Reserved (6Bytes,Fixed 0x00)	
SetRejoinDurationReq	ALL(0xFF)	0x07	0xFF	RejoinDuration (2Bytes Unit: 1Min)	Reserved (7Bytes,Fixed 0x00)		
SetRejoinDurationRsp		0x87		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
GetRejoinDurationReq		0x06		Reserved (9Bytes,Fixed 0x00)			
GetRejoinDurationRsp		0x86		RejoinDuration (2Bytes)	Reserved (7Bytes,Fixed 0x00)		

				Unit: 1Min)					
GetRealDataCode	ALL(0xFF)	0x05	0xFF	Reserved (9Bytes,Fixed 0x00)					
SetGlobalCalibrateReq	ALL(0xFF)	0x04	0xFF	Channel(1Byte,0_Channel1,1_Channel2,etc)	Multiplier(2bytes,Unsigned)	Divisor(2bytes,Unsigned)	DeltValue(2bytes,Signed)	StandardValue(2bytes,Signed)	
SetGlobalCalibrateRsp		0x84		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
GetGlobalCalibrateReq		0x03		Reserved (9Bytes,Fixed 0x00)					
GetGlobalCalibrateRsp		0x83		Channel(1Byte,0_Channel1,1_Channel2,etc)	Multiplier(2bytes,Unsigned)	Divisor(2bytes,Unsigned)	DeltValue(2bytes,Signed)	StandardValue(2bytes,Signed)	
SetDwelltimeReq	ALL(0xFF)	0x02	0xFF	UpLinkDewelltimeOnoff(1Byte 1_ ON 0_Off)	DownLinkDewelltimeOnoff(1Byte 1_ ON 0_Off)	Reserved (7Bytes,Fixed 0x00)			
SetDwelltimeRsp		0x82		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				
GetDwelltime		0x01		Reserved (9Bytes,Fixed 0x00)					

mReq					
GetDwelltimeRsp		0x81		UpLinkDewelltimeOnoff(1Byte 1_ ON 0_Off)	DownLinkDewelltimeOnoff(1B yte 1_ ON 0_Off) Reserved (7Bytes,Fixed 0x00)
SetLastMessageResendtimeReq		0x1F		Resendtime((1Byte,Unit:1s,range:3-254s),when 0 or 255 no resend,default is no resend)	Reserved (8Bytes,Fixed 0x00)
SetLastMessageResendtimeRsp	ALL(0xFF) only used in contactswitch devicetype	0x9F	0xFF	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
GetLastMessageResendtimeReq		0x1E			Reserved (9Bytes,Fixed 0x00)
GetLastMessageResendtimeRsp		0x9E		Resendtime((1Byte,Unit:1s,range:3-254s),when 0 or 255 no resend,default is no resend)	Reserved (8Bytes,Fixed 0x00)

Note: mintime present the sensor's sampleperiod, but dont apply on interrupted type sensor's report, such as PIR Sensor, Contact Switch Sensor ,etc.

If interrupted type sensor's state change, it send report immediately.

Ack's default value is OFF

ADR 's default value is ON

ResumeNet's default value is ON

3、 ChangeActiveMode&InfoCmd(Bi-Direction)(only valid in highdatarate)-----for CR2 CustomerSupport

FPort: 0x08

Bytes	1	Var(Fix =16 Bytes)
	CmdID	NetvoxPayLoadData

0A000000000000000000000000000000

Description	CmdID	Var(Max=16 Bytes)	
SetActiveModeReq	0x01	ActiveMode(1Byte 1_ABP ON 0_OTTA)	Reserved (15Bytes,Fixed 0x00)
SetActiveModeRsp	0x81	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetActiveModeReq	0x02	Reserved (16Bytes,Fixed 0x00)	
GetActiveModeRsp	0x82	ActiveMode(1Byte 1_ABP ON 0_OTTA)	Reserved (15Bytes,Fixed 0x00)
SetAPPEUI_OTAAReq	0x03	APPEUI(8bytes)	Reserved (8Bytes,Fixed 0x00)
SetAPPEUI_OTAAReq	0x83	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetAPPEUI_OTAAReq	0x04	Reserved (16Bytes,Fixed 0x00)	
GetAPPEUI_OTAAReq	0x84	APPEUI(8bytes)	Reserved (8Bytes,Fixed 0x00)
SetAPPKEY_OTAAReq	0x05	APPKEY(16bytes)	
SetAPPKEY_OTAAReq	0x85	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetAPPKEY_OTAAReq	0x06	Reserved (16Bytes,Fixed 0x00)	

GetAPPKEY_OTAAReq	0x86	APPKEY(16bytes)	
SetDevAddr_ABPRsp	0x07	DevAddr_ABP(4bytes)	Reserved (12Bytes,Fixed 0x00)
SetDevAddr_ABPRsp	0x87	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetDevAddr_ABPRsp	0x08	Reserved (16Bytes,Fixed 0x00)	
GetDevAddr_ABPRsp	0x88	DevAddr_ABP(4bytes)	Reserved (12Bytes,Fixed 0x00)
SetAPPSKEY_ABPRsp	0x09	APPSKEY(16bytes)	
SetAPPSKEY_ABPRsp	0x89	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetAPPSKEY_ABPRsp	0x0A	Reserved (16Bytes,Fixed 0x00)	
GetAPPSKEY_ABPRsp	0x8A	APPSKEY(16bytes)	
SetNWKSKEY_ABPRsp	0x0B	NWKSKEY(16bytes)	
SetNWKSKEY_ABPRsp	0x8B	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetNWKSKEY_ABPRsp	0x0C	Reserved (16Bytes,Fixed 0x00)	
GetNWKSKEY_ABPRsp	0x8C	NWKSKEY (16bytes)	

4、 **PassThroughCmd(Bi-Direction)** eg R718PC/R718PD

FPort: 0x0A

Bytes	1	Var
	CmdID	NetvoxPayloadData

Description	CmdID	Var
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SetPowerOnSensorTimeReq	0x01	PowerOnTime(1Byte, Unit: 1s)
SetPowerOnSensorTimeRsp	0x81	Status(0x00_success)
GetPowerOnSensorTimeReq	0x02	
GetPowerOnSensorTimeRsp	0x82	PowerOnTime(1Byte, Unit: 1s)
SetPollSensorPeriodReq	0x03	Period(2Byte, Unit: 1s)
SetPollSensorPeriodRsp	0x83	Status(0x00_success)
GetPollSensorPeriodReq	0x04	
GetPollSensorPeriodRsp	0x84	Period(2Byte, Unit: 1s-- 0xffff present no periodfunction)
SetPollSensorRawCmdReq	0x05	SensorRawCmd(Var bytes,according sensor datasheet)
SetPollSensorRawCmdRsp	0x85	Status(0x00_success)
GetPollSensorRawCmdReq	0x06	
GetPollSensorRawCmdRsp	0x86	SensorRawCmd (Var bytes,according sensor datasheet)
SensorRawCmdIndication	0x87	SensorRawCmd (Var bytes,according sensor datasheet)
SetBaudRateReq	0x08	BaudRate(1byte, (00—115200bps , 01—57600, 02—38400, 03—28800, 04—19200, 05—9600, 06—4800, 07—2400))
SetBaudRateRsp	0x88	Status(0x00_success)
GetBaudRateReq	0x09	
GetBaudRateRsp	0x89	BaudRate(1byte, (00—115200bps , 01—57600, 02—38400, 03—28800, 04—19200, 05—9600, 06—4800, 07—2400))

5、 **ConfigButtonPresTime(Bi-Direction)** For PushButtonDevice Such as R312, R312A, R718T, R718T2, RB02I (R730T,R730T2)

FPort: 0x0D

Description	CmdID	PayLoad(Fix byte,1byte)
SetButtonPresTime Req	0x01	PressTime(1bytes, 0x00_QuickPush_Less then 1 Second, OhterValue present the presstime such as 0x01_1 Second push, 0x02_2 Seconds push, 0x03_3 Seconds push, 0x04_4 Seconds push, 0x05_5 Seconds push, 0x06_6 Seconds push,and so on
SetButtonPresTime Rsp	0x81	Status(0x00_Success 0x01_Failure)
GetButtonPresTime Req	0x02	
GetButtonPresTime Rsp	0x82	PressTime(1bytes, 0x00_QuickPush_Less then 1 Second, OhterValue present the presstime such as 0x01_1 Second push, 0x02_2 Seconds push,

		0x03_3 Seconds push, 0x04_4 Seconds push, 0x05_5 Seconds push, 0x06_6 Seconds push,and so on)
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6、 GlobalCalibrateCmd(Bi-Direction)

FPort: 0x0E

Description	CmdID	Sensor Type	Payload(Fix =9 Bytes)				
SetGlobalCalibrateReq	0x01	See below	Channel(1Byte,0_Channel1,1_Channel2,etc)	Multiplier(2bytes,Unsigned)	Divisor(2bytes,Unsigned)	DeltaValue(2bytes,Signed)	Reserved (2Bytes,Fixed 0x00)
SetGlobalCalibrateRsp	0x81		Channel(1Byte,0_Channel1,1_Channel2,etc)	Status(1Byte,0x00_success)	Reserved (7Bytes,Fixed 0x00)		
GetGlobalCalibrateReq	0x02		Channel(1Byte,0_Channel1,1_Channel2,etc)	Reserved (8Bytes,Fixed 0x00)			
GetGlobalCalibrateRsp	0x82		Channel(1Byte,0_Channel1,1_Channel2,etc)	Multiplier(2bytes,Unsigned)	Divisor(2bytes,Unsigned)	DeltaValue(2bytes,Signed)	Reserved (2Bytes,Fixed 0x00)

SensorType - byte –
 0x01_Temperature Sensor

0x02_Humidity Sensor
0x03_Light Sensor
0x04_PM2.5 Sensor
0x05_CO Sensor
0x06_CO2 Sensor
0x07_O3 Sensor
0x08_O2 Sensor
0x09_NO Sensor
0x0A_NO2 Sensor
0x0B_SO2 Sensor
0x0C_VOCs Sensor
0x0D_C2H3CL Sensor
0x0E_CL2 Sensor
0x0F_H2S Sensor
0x10_HCL Sensor
0x11_HCN Sensor
0x12_NH3 Sensor
0x13_PH Sensor
0x14_CH3SH Sensor
0x15_ETO Sensor
0x16_CH4 Sensor
0x17_EC Sensor(electric conductivity)
0x18_Noise Sensor
0x19_WindSpeed Sensor
0x1A_DOG Sensor((dissolved oxygen)
0x1B_ORP Sensor((Oxidation-ReductionPotential)

0x1C_QY Sensor(Standard atmospheric pressure)

0x20_Temperature_Soil_Sensor

0x21_Humid_Soil_Sensor

0x31_ADC Sensor

0x32_Current Sensor

0x33_Resistive Sensor

0x34_PT1000 Resistance

0x35_Air PressSensor

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