

## Netvox LoRaWAN Application Command V1.9

### 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 devicetype support	
		Change R727 Series 's device name to the new name with RA07**Y Series,Such R72716 change to 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	

## 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(Signed 2Bytes, unit:0.1 °C)	Temperature2(Signed 2Bytes, unit:0.1 °C)	Reserved(3Bytes, fixed 0x00)	
R718CJ4/CK4/CR4/CE4	0x38/0x39/0x3A/0x3B/0x3C	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signed 2Bytes, unit:0.1 °C)	Temperature2(Signed 2Bytes, unit:0.1 °C)	Reserved(3Bytes, fixed 0x00)	

		0x02	Battery(1Byte, unit:0.1V)	Temperature3(Signed2Bytes,unit:0.1 ° C)	Temperature4(Signed2Bytes,unit:0.1 ° C)	Reserved(3Bytes, fixed 0x00)
R718B2	0x14	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signed2Bytes,unit:0.1 ° C)	Temperature2(Signed2Bytes,unit:0.1 ° C)	Reserved(3Bytes, fixed 0x00)
R718B4	0x2E	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signed2Bytes,unit:0.1 ° C)	Temperature2(Signed2Bytes,unit:0.1 ° C)	Reserved(3Bytes, fixed 0x00)
		0x02	Battery(1Byte, unit:0.1V)	Temperature3(Signed2Bytes,unit:0.1 ° C)	Temperature4(Signed2Bytes,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	0x1A/0x1B/0x21/0x25/ 0x27/0x4F/0x5B/0x82/ 0x89/0x8B/0x8D	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/0x43/ 0x45/0x4C/0x56/0x6C/ 0x7E/0x8A/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/0x7D	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(Float16_2Bytes, m/s <sup>2</sup> )	AccelerationY(Float16_2Bytes, m/s <sup>2</sup> )	AccelerationZ(Float16_2Bytes, m/s <sup>2</sup> )	Reserved(1Bytes, fixed 0x00)
		0x02	VelocityX(Float16_2Bytes, mm/s)	VelocityY(Float16_2Bytes, mm/s)	VelocityZ(Float16_2Bytes, mm/s)	Temperature(Signed2Bytes, unit:0.1 ° C)	
R718IA/R718IB/R730IA/R730IB	0x20/0x2A/0x74/0x75	0x01	Battery(1Byte, unit:0.1V)	ADCRawValue(2Bytes, unit:1mv)	Reserved(5Bytes, fixed 0x00)		
R718IA2/R718IB2/R730IA2/R730IB2	0x41/0x42/0x76/0x77	0x01	Battery(1Byte, unit:0.1V)	ADCRawValue1(2Bytes, unit:1mv)	ADCRawValue2(2Bytes, unit:1mv)	Reserved(3Bytes, fixed 0x00)	
R718IJK	0x5C	0x01	Battery(1Byte, unit:0.1V)	Status1(1Byte 0:off 1:on)	Current(1Bytes, unit:1mA)	ADCRawValue2(2Bytes, unit:1mv)	Reserved(3Bytes, fixed 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, unit:1mA)	Reserved(5Bytes, fixed 0x00)	
R718KB	0x23	0x01	Battery(1Byte, unit:0.1V)	Resistive(4Bytes, unit:10hms)	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)	illuminance	Occupy(1Byte)	Reserved(2Bytes, fixed 0x00)

			unit:0.1V)	2Bytes,unit:0.01 ° C)	(2Bytes,unit:1 Lux)	0:Un Occupy 1: Occupy)	xed 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 ,0.1ppm)	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 ,0.1db)	Reserved(1Bytes, 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	EC5SoildHumidity(2Bytes,u	Reserved(1Bytes, fixed 0x00)



					2Bytes,unit:0.01° C)	nit:0.01%)	
		0x0A	Battery(1Byte, unit:0.1V)	5TESoildHumidtiy(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, unit:0.1V)	Status1(1Byte 0:off 1:on)	Status2(1Byte 0:off 1:on)	Reserved(5Bytes, fixed 0x00)	
R801A	0x08	0x01	Battery(1Byte, unit:0.1V)	Temperature1(Signed 2Bytes,unit:0.01° C)	Temperature2(Signed 2Bytes,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,	WaterLeakLocation(	Reserved(5Bytes, fixed 0x00)		

			unit:0.1V)	2Bytes ,10cm)(Normal_0000,SenorNotConnected_FFFF,Other Value_LeakLocation)			
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)	Reserved(1Bytes, fixed 0x00)
		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)	TankLevl(1Byte, Unit:1%)	Reserved(4Bytes, fixed 0x00)	

R718MA/R311D/R730MA	0x26/0x4E/0x81	0x01	Battery(1Byte, unit:0.1V)	RSSI(2Bytes,SignedV aule,Unit:1dbm)	SNR(1Byte,Signed Value)	HeartInte rval(2Bytes, Unit:1s)	Reserved(2Bytes,fixe d 0x00)
RA0716/R72616/R72716(alias RA0716Y)/R718SA/R728SA/R729SA/RA0716A	0x35/0x36/x037/0 x5D/0x5E/0x05F/0 x6A	0x01	Battery(1Byte, unit:0.1V)	Temperature(Signed 2Bytes,unit:0.01° C)	Humidity(2Bytes,u nit:0.01%)	PM2.5(2B yte 1ug/m3)	Reserved(1Bytes,fixe d 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(2Byte s,Unit:1ma)	Mulitplier(1Byte),the real current should convert with Current* Mulitplier		Reserved(4Bytes,fixed 0x00)
R718N3	0x4A	0x01	Battery(1Byte, unit:0.1V)	Current1(2Byt es,Unit:1ma)	Current2(2By tes,Unit:1ma)	Current3(2B ytes,Unit:1 ma)	Mulitplier(1Byte),the real current should convert with Current* Mulitplier
R602A	0x69	0x01	Hearbeattime(2B ytes,Unit:1s)	Reserved(6Bytes,fixed 0x00)			
R720C	0x70	0x01	Battery(1Byte, unit:0.1V)	AirPressure (4Bytes,unit:0.01hPa )	Temperature(Si gned2Bytes,uni t:0.01° C)	Reserved(1Bytes,fixed 0x00)	
RA10	0x71	0x01	OnOff(1Byte, OFF_0x00,ON_0x 01)	Reserved(7Bytes,fixed 0x00)			

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

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

**For RA07/R726/R727(alias RA07\*\*Y 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℃

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℃ (must decode with signed type vaule,such int16,you also can decode by  $0x1000-0x\text{FC18}=0x3E8=1000/100=-10.00\text{ }^{\circ}\text{C}$ )

1A90---humidity,represent 68.00%

000000---reserveddata

010B019F09EA1A90000000

01—protocalversion

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℃

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				
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)				
ConfigRepo		0x01		MinTime(2bytes)	MaxTime(2bytes)	CurrentChange(2b	PowerChange (2byte	Reserved

rtReq				Unit:s)	Unit:s)	yte Unit:1mA)	Unit:1W)	(1Byte,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 (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_NoLedIndication, 0x01_LedBlinkMode1 in Parrel to Waring, 0x02_LedBlinkMode2 in Parrel to Waring)	WaringDurition(2bytes,Unit:1s)	Reserved (5Bytes,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)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		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)			
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfigReportRsp		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)	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)	CurrentChange(2 byte Unit:1mA)	Reserved (3Bytes,Fixed 0x00)	
ConfigReportReq	R711/ R718A/ R718AB/	0x01	0x01/0x0B/ 0x13/0x6B/ 0x6E/0x6F	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte)	HumidityChange (2byte Unit:0.01%)

	R718WBA/ R720A/ R720B						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)				
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℃)	AirPressChange(2byte Unit:0.1hPa)	
ConfigReportReq	R718CJ2/CK2/ CT2/CR2/CE2/ R718CJ4/CK4/	0x01	0x15/16/17 /18/19/0x3 8/0x39/3x3	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.1℃)	Reserved (2Bytes,Fixed 0x00)	
ConfigReportRsp	CT4/CR4/CE4/ R730CJ2/	0x81	A/0x3B/0x3 C/0x78/0x7	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				



ReadConfig ReportReq	R730CK2/ R730CT2/	0x02	9/0x7A/0x7B/0x7C/0x9	Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp	R730CR2/ R730CE2/ R718CJ/	0x82	0/0x91/0x92/0x93/0x94/0x95	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1b yte Unit:0.1v)	TemperatureChang e(2byte Unit:0.1℃)	Reserved (2Bytes,Fixed 0x00)
SetThermocoupleTypeReq	R718CK/ R718CT/ R718CR/	0x03		ThermocoupleType(1Byte,0x00_Jtype 0x01_Ktype,0x02_Ttype,0x03_Rtype,0x04_Etype)			Reserved (8Bytes,Fixed 0x00)	
SetThermocoupleTypeRsp	R718CE/ R718B	0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
GetThermocoupleTypeReq		0x04		Reserved (9Bytes,Fixed 0x00)				
GetThermocoupleTypeRsp		0x84		ThermocoupleType(1Byte,0x00_Jtype 0x01_Ktype,0x02_Ttype,0x03_Rtype,0x04_Etype)			Reserved (8Bytes,Fixed 0x00)	
SetR718MBTypeReq	R718MBA/	0x03		R718MBType(1Bytes,0x01_R718MBA,0x02_R 718MBB,0x03_R718MBC)		Reserved (8Bytes,Fixed 0x00)		
SetR718MBTypeRsp	R718MBB/ R718MBC/	0x83	0x27/0x2B/ 0x2C/0x82/ 0x83/0x84	Status(0x00_success)		Reserved (8Bytes,Fixed 0x00)		
GetR718MBTypeReq	R730MBA/ R730MBB/	0x04		Reserved (9Bytes,Fixed 0x00)				
GetR718MBTypeRsp	R730MBC	0x84		R718MBType(1Bytes,0x01_R718MBA,0x02_R718MBB,0 x03_R718MBC)			Reserved (8Bytes,Fixed 0x00)	

SetActiveThresholdReq		0x05		Threshold(2Bytes)	Deactivetime(1Byte,Unit:1s)	Reserved (6Bytes,Fixed 0x00)		
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		0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	AccelerationChange(2byte Unit:m/s2)	Reserved (2Bytes,Fixed 0x00)
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfigReportRsp	R718E	0x82	0x1C	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)			
GetActiveT		0x04		Reserved (9Bytes,Fixed 0x00)				

hresholdReq										
GetActiveThresholdResp		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)			
SetR311FTypeResp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					
GetR311FTypeReq		0x04		Reserved (9Bytes,Fixed 0x00)						
GetR311FTypeResp		0x84		R311FType(1Bytes,0x01_R311FA,0x02_R311FB,0x03_R311FC)			Reserved (8Bytes,Fixed 0x00)			
SetActiveThresholdReq		0x05		Threshold(2Bytes)	Deactivetime(1Byte,Unit:1s)	Reserved (6Bytes,Fixed 0x00)				
SetActiveThresholdResp		0x85		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)					
GetActiveThresholdReq		0x06		Reserved (9Bytes,Fixed 0x00)						
GetActiveThresholdResp		0x86		Threshold(2Bytes)	Deactivetime(1Byte,Unit:1s)	Reserved (6Bytes,Fixed 0x00)				
ConfigRepo		R718B2/		0x01	0x14/0x2E	MinTime(2bytes Unit:s)	MaxTime(2bytes)	BatteryChange(1by	TemperatureChange(	Reserved

rtReq	R718B4				Unit:s)	te Unit:0.1v)	2byte Unit:0.1℃)	(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℃)	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)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		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/ R718IA2/	0x01	0x20/0x2A/ 0x41/0x42/ 0x74/0x75/ 0x76/0x77	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	ADCRawValue Change(2byte Unit:1mV)	Reserved (2Bytes,Fixed 0x00)	
ConfigReportRsp	R718IB2/ R730IA/	0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)				

ReadConfig ReportReq	R730IB/ R730IA2/ R730IB2	0x02		Reserved (9Bytes,Fixed 0x00)						
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	ADCRawValue Change (2byte Unit: 1mV)	Reserved (2Bytes,Fixed 0x00)		
ConfigReportReq	R718IJK	0x01	0x5C	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		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)	ADCRawValue Change (2byte Unit: 1mV)	CurrentChange(1byte Unit:1mA)	Reserved (1Bytes,Fixed 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)					
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)						
ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TankLevelChange(1Byte)	Reserved (3Bytes,Fixed 0x00)		

							e,Unit:1%)	
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/ R718DB/	0x01	0x02/0x1A/ 0x1B/0x21/ 0x25/0x26/	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)	
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/	0x82	0x4F/0x50/ 0x51/0x4E/ 0x59/0x1F/ 0x3F/0x7D/ 0x7E/0x7F/ 0x80/0x81/	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)	

	R718LB2/ R311FA/ R311FB/ R311FC/ R311D/ R719/ R718H/ R718H2/ R730F/ R730F2/ R730H/ R730H2/ R730MA/ R730DA/ R718DA2/ R730DB/ R730DB2/ R730LB/ R730LB2		0x89/0x8A/ 0x8B/0x8C/ 0x8D/0x8E			
SetDetectThresholReq	R719	0x03		DetectThreshold(2bytes)	Reserved (7Bytes,Fixed 0x00)	
SetDetectThresholRs		0x83	0x59	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)	

p							
GetDetectThresholdReq		0x04		Reserved (9Bytes,Fixed 0x00)			
GetDetectThresholdResp		0x84		DetectThreshold(2bytes)	Reserved (7Bytes,Fixed 0x00)		
SetFilterTimeReq		0x03		FilterTime(1byte,Unit:5ms)	Reserved (8Bytes,Fixed 0x00)		
SetFilterTimeResp	R718H/ R718H2/	0x83	0x1F/0x3F/	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
GetFilterTimeReq	R730H/ R730H2	0x04	0x7F/0x80	Reserved (9Bytes,Fixed 0x00)			
GetFilterTimeResp		0x84		FilterTime(1byte,Unit:5ms)	Reserved (8Bytes,Fixed 0x00)		
ConfigReportReq		0x01		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)
ConfigReportResp	R311W/ R311CA/ R311CB/ R311CC	0x81	0x06/0x4C/ 0x56/0x6C	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	RB021/ R718T/ R718T2/ R312A/ R312	0x01	0x10/0x31/ 0x48/0x4D/ 0x55	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	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	RA02A	0x01	0x0A	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)				

ReadConfig ReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Reserved (4Bytes,Fixed 0x00)	
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)			
ReadConfig ReportReq		0x02		Reserved (9Bytes,Fixed 0x00)				
ReadConfig ReportRsp		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)				
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)					
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,Fixed 0x00)			
SetSensorParaReq		0x03		LineLength(2Bytes,Unit:10cm)	Sensitivity(1Byte,High_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,High_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(2 bytes 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(2 bytes Unit:s)	

ConfigReportReq	RB11E/ RB11E1	0x01	0x03/0x07	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	TemperatureChange(2byte Unit:0.01 °C)	illumiance (2byte 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 °C)	illumiance 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)				
SetPIRWorkTimeReq(ForCW11)		0x05		StartHour(1byte)	EndHour(1byte)	Reserved (7Bytes,Fixed 0x00)				
SetPIRWorkTimeRsp(ForCW11)	0x85	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)							

rCW11)								
GetPIRWorkTimeReq(ForCW11)		0x06		Reserved (9Bytes,Fixed 0x00)				
GetPIRWorkTimeRsp(ForCW11)		0x86		StartHour(1byte)	EndHour(1byte)	Reserved (7Bytes,Fixed 0x00)		
ConfigReportReq	R718Q	0x01	0x5B	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)	
SetIRDisableTimeReq		0x03		IRDisableTime(2bytes Unit:s)	IRDetectionTime(2bytes Unit:s)	Reserved (7Bytes,Fixed 0x00)		
SetIRDisableTimeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
GetIRDisableTimeReq		0x04		Reserved (9Bytes,Fixed 0x00)				

GetIRDisableTimeRsp		0x84		IRDisableTime(2bytes Unit:s)	IRDectionTime(2bytes Unit:s)	Reserved (7Bytes,Fixed 0x00)				
ConfigReportReq	R311G	0x01	0x04	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Illuminancechange(2 bytes 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)	Illuminancechange(2 bytes Unit: 1Lux)	Reserved (2Bytes,Fixed 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)	BatteryCha	Illuminancechange(4bytes Unit:			

rtReq					Unit:s)	nge(1byte Unit:0.1v)	1Lux)
ConfigReportRsp		0x81		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
ReadConfigReportReq		0x02		Reserved (9Bytes,Fixed 0x00)			
ReadConfigReportRsp		0x82		MinTime(2bytes Unit:s)	MaxTime(2 bytes Unit:s)	BatteryChange(1by te 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)		
SetSunlightSampleRangeRsp		0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
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(2byt es 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(2 bytes Unit:s)	BatteryChange(1byte Unit:0.1v)	Resistive (4bytes Unit: 10hm)
ConfigReportReq	RA07 Series/ R726 Series/ R727 Series(alias RA07**Y series)/ RA0716/ R72616/ R72716(alias RA0716Y)/ RA07A Series / R726A Series / R727A/ R718PA Series / R718PB Series /	0x01	0x05/0x09/ 0x0D/0x35/ 0x36/0x37/ 0x52/0x53/ 0x54/0x57/ 0x58/0x5D/ 0x5E/0x5F/ 0x60/0x61/ 0x62/0x63/ 0x64/0x65/ 0x66/0x67/ 0x68/0x6A	MinTime(2bytes Unit:s)	MaxTime(2bytes Unit:s)	Reserved (5Bytes,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)	Reserved (5Bytes,Fixed 0x00)	
SetLDOSettingReq		0x03		LD O's Altitude(LDO's PSU(2bytes))	Reserved (5Bytes,Fixed 0x00)		
SetLDOSettingRsp	R718SA/ R728SA/ R729SA/	0x83		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
GetLDOSetting		0x04		Reserved (9Bytes,Fixed 0x00)			



ingReq	R718R Series/				
GetLDOSettingRsp	R718U Series/ R718S Series/ R728R Series/ R728U Series/ R728S Series/	0x84		LDO's Altitude(2bytes)	LDO's PSU(2bytes)  Reserved (5Bytes,Fixed 0x00)
ORPCalibrateReq	R729R Series/ R729U Series/ R729S Series/ RA0716A	0x05		Standard ORP(2bytes, 86mv Or 256mv)	Reserved (7Bytes,Fixed 0x00)
ORPCalibrateRsp		0x85		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
PHCalibrateReq		0x06		Standard PH(2bytes,OPH Or 4PH Or 9PH)	Reserved (7Bytes,Fixed 0x00)

PHCalibrateRSP	0x86	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
NTUCalibrateReq	0x07	StandardNTU(2bytes, 0 or fullscale unit*10)	Reserved (7Bytes,Fixed 0x00)
NTUCalibrateRsp	0x87	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
SetWireLengthReq	0x08	Length(2bytes,Unit:1cm)	Reserved (7Bytes,Fixed 0x00)
SetWireLengthRsp	0x88	Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)
GetWireLengthReq	0x09	Reserved (9Bytes,Fixed 0x00)	
GetWireLengthRsp	0x89	Length(2bytes,Unit:1cm)	Reserved (7Bytes,Fixed 0x00)
SetSoilTypeReq	0x0A	SoilType(1byte,0x00_Mineral Soil 0x01_PottingSoil 0x02_Rockwool)	Reserved (8Bytes,Fixed 0x00)
SetSoilTypeRsp	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)	
SoilCalibrateReq		0x0C		WVCDelt(1byte SignedValue,Unit:1%)	Reserved (8Bytes,Fixed 0x00)	
SoilCalibrateRsp		0x8C		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)	
SetAckOnOffReq	ALL(0xFF)	0x0F	0xFF	ACKOnOff(1Byte 1_Ack ON 0_AckOff)	Reserved (8Bytes,Fixed 0x00)	
SetAckOnOffRsp		0x8F		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)	
GetAckOnOffReq		0x0E		Reserved (9Bytes,Fixed 0x00)		
GetAckOnOffRsp		0x8E		ACKOnOff(1Byte 1_Ack ON 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_ADR ON 0_ADROff)	Reserved (8Bytes,Fixed 0x00)	
SetADRRsp Rsp		0x8C		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)	

GetADRON OffReq		0x0B		Reserved (9Bytes,Fixed 0x00)			
GetADRRsp Rsp		0x8B		ADRONOff(1Byte 1_ADR ON 0_ADROff)	Reserved (8Bytes,Fixed 0x00)		
SetResume NetOnOffR eq	ALL(0xFF)	0x0A	0xFF	ResumeNetOnOff(1Byte 1_ ResumeNetON 0_ResumeNetOff)	Reserved (8Bytes,Fixed 0x00)		
SetResume NetRsp		0x8A		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
GetResume NetOnOffR eq		0x09		Reserved (9Bytes,Fixed 0x00)			
GetResume NetRsp		0x89		ResumeNetOnOff(1Byte 1_ResumeNet ON 0_ResumeNetOff)	Reserved (8Bytes,Fixed 0x00)		
GetLoRaWA NLibVersion Req		0x08	0xFF	Reserved (9Bytes,Fixed 0x00)			
GetLoRaWA NLibVersion Rsp		0x88		MajorVer(1Byte)	MinorVer(1Byte)	SubVer(1B yte)	Reserved (6Bytes,Fixed 0x00)
SetRejoinD urationReq		ALL(0xFF)	0x07	0xFF	Rejoi nDur ation	Reserved (7Bytes,Fixed 0x00)	

				(2Bytes Unit: 1Min )				
SetRejoinDurationRsp		0x87			Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)		
GetRejoinDurationReq		0x06			Reserved (9Bytes,Fixed 0x00)			
GetRejoinDurationRsp		0x86		RejoinDuration (2Bytes Unit: 1Min )	Reserved (7Bytes,Fixed 0x00)			
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)		

librateRsp								
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)			
GetDwelltimeReq		0x01		Reserved (9Bytes,Fixed 0x00)				
GetDwelltimeRsp		0x81		UpLinkDewelltimeOnoff(1Byte 1_ ON 0_Off)	DownLinkDewelltimeOnoff(1Byte 1_ ON 0_Off)	Reserved (7Bytes,Fixed 0x00)		
SetLastMessageResendtimeReq	ALL(0xFF) only used in contactswitch devicetype	0x1F	0xFF	Resendtime((1Byte,Unit:1s,range:3-254s),when 0 or 255 no resend,default is no resend)	Reserved (8Bytes,Fixed 0x00)			
SetLastMessageResendtimeRsp		0x9F		Status(0x00_success)	Reserved (8Bytes,Fixed 0x00)			
GetLastMessage		0x1E		Reserved (9Bytes,Fixed 0x00)				

sageResend timeReq				
GetLastMes sageResend timeRsp		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_ABPRReq	0x07	DevAddr_ABP(4bytes)	Reserved (12Bytes,Fixed 0x00)
SetDevAdd_ABPRsp	0x87	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetDevAdd_ABPRReq	0x08	Reserved (16Bytes,Fixed 0x00)	
GetDevAdd_ABPRsp	0x88	DevAddr_ABP(4bytes)	Reserved (12Bytes,Fixed 0x00)
SetAPPSKEY_ABPRReq	0x09	APPSKEY(16bytes)	
SetAPPSKEY_ABPRsp	0x89	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)
GetAPPSKEY_ABPRReq	0x0A	Reserved (16Bytes,Fixed 0x00)	
GetAPPSKEY_ABPRsp	0x8A	APPSKEY(16bytes)	
SetNWKSKEY_ABPRReq	0x0B	NWKSKEY(16bytes)	
SetNWKSKEY_ABPRsp	0x8B	Status(0x00_success)	Reserved (15Bytes,Fixed 0x00)



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GetNWKSKEY_ABPreq	0x0C	Reserved (16Bytes,Fixed 0x00)
GetNWKSKEY_ABPRsp	0x8C	NWKSKEY (16bytes)

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