Compare List for Dragino LoRa Gateway

Item	LG01-P/LG01-S/OLG01	LG01-N/OLG01-N	LG02/OLG02	LG308	LPS8
ChipSet Solution	Base on SX1276/SX1278 LoRa module solution			Base on SX1301/SX1308 LoRa concentrator solution Try run use SX1308 version. Final release base on SX1301 v1.0 : SX1308 v1.1:SX1301 + 2 x 1257 + 1 x SX1276 + GPS v1.2: SX1301 + 2 x 1257 (Ship After 2019, Jun)	SX1308 + 2* SX1257
Overview	Due to hardware chipset limiation, this solution can only work for: 1) ABP LoRaWAN node transmit in single frequency 2) Limitation OTAA 3) Private Protocol Chapter 3.6.2 [Limitations] from LoRa IoT Kit User manual http://www.dragino.com/downloads/index.php?dir=LoRa_IoT_Kit/v2-Kit/&file=Single%20Channel%20LoRa%20IoT%20Kit%20v2%20User%20Manual_v1.0.1.pdf Descripe detail of this limitation and a solution for Arduino control End Node.			SX1301 SX1308 can works with: 1) Standard LoRaWAN device. 2) Private LoRa protocol.	
Description	Single Channel LoRa Gateway	Single Channel LoRa Gateway	Dual Channel LoRa Gateway	10 + 1 Channel LoRaWan Gateway	
Is Open Source	Yes	Yes	Yes	Yes	
LoRa Protocol	Private LoRa or Packet Forward	Private LoRa or Packet Forward	Private LoRa or Packet Forward LoRa Repeater	Private LoRa or Semtech Packet Forward	
Possible to custmized LoRa Protocol?	Yes, Need Arduino Skill	Yes, Need Linux & C Skill	Yes, Need Linux & C Skill	Yes, Need Linux & C Skill	
LoRa Module	1 x SX127x	1 x SX127x	2 x SX127x	1 x SX1308/SX1301 + 2 x SX1257	SX1308 + 2* SX1257
TX/RX Channels	1 x TX or 1 RX , half duplex	1 x TX or 1 RX , half duplex	2x TX/RX, Full duplex(current software only use 1 TX + 1 RX)	10 x RX + 1 TX	
LoRa Controller	Atmega328P MCU	AR9331 24K MIPS / Linux	AR9331 24K MIPS / Linux	AR9331 24K MIPS / Linux	
CPU	AR9331 24K MIPS	AR9331 24K MIPS	AR9331 24K MIPS	AR9331 24K MIPS	
Operation System	OpenWrt	OpenWrt	OpenWrt	OpenWrt	
LoRaWAN support	ABP only	ABP / OTAA Limited LoRaWAN	ABP / OTAA Limited LoRaWAN	Standard LoRaWAN	
End Node Compatibilit	Private LoRa End node or LoRaWAN End Node which work in single Frequency and have a longer RX time	Private LoRa End node or LoRaWAN End Node which work in single Frequency and have a longer RX time	Private LoRa End node or LoRaWAN End Node which work in single Frequency and have a longer RX time	Any LoRaWAN Compatible End node	
3G/4G Cellular Interface	Optional Built-in customized 3G/4G Cellular	Optional Built-in customized 3G/4G Cellular module	Optional Built-in customized 3G/4G Cellular module	Optional General Mini PCI-E Cellular module	NO support
Capacity: 3 LoRa Nodes Sent out packet in ABP mode (SF7) every 10 seconds. 3 packets per	60% Packet Lost in the network	1% Packet Lost	1% Packet Lost	No Packet Lost	
Recommend Application Enviroment:	Lab Test Enviroment, Study	1 ~ 300 a) Limited LoRaWAN,All LoRa End node base on ABP, Single Frequency, b) Network have less downlink stream c) Private LoRa Protocol	1 ~ 300 a) Limited LoRaWAN, All LoRa End node base on ABP, Or modified OTAA protocol. b) Private LoRa Protocol	1~1000 a) Standard LoRaWAN network with LoRaWAN End node from different supplier b) Private LoRa Protocol	
Program Method for LoRa	Arduino	OpenWrt/ Linux	OpenWrt/ Linux	OpenWrt/ Linux	
Type of Network Cell	Femotocell	Femotocell	Femotocell	Macrocell/Picocell	Picocell
Production Status:	In production	In production	In production	In production	In production