#### I-7531-FD-G FAQ

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### Q1 · What is the difference between I-7531-G and I-7531-FD-G? How should users choose? (2022/11/29, Bao)

A: The performance of I-7531-FD-G is better than I-7531-G and backward compatible. The main differences are shown in the table below, therefore, it is recommended that users choose I-7531-FD-G first. (2022/11/29, Bao)

Model Name	I-7531-G	I-7531-FD-G
Baud Rate		CAN bus: 5 k ~ 800 kbps
	5 k ~ 800 k bps	CAN FD: Arbitration rate up
		to 1000 kbps, data rate up to
		8000 kbps
Specification		ISO-11898-2, CAN 2.0A/B
	ISO-11898-2, CAN 2.0A and	and CAN FD
	CAN 2.0B	(CAN FD support ISO and
		Non-ISO standards)
Time Delay	200ns	175ns
Consumption	2 W	1W

# Q2 · When the CAN signal is repeated through I-7531-FD-G, how much communication distance can be extended? (2022/11/29, Bao)

A: After the CAN signal repeat through the I-7531-FD-G, the CAN signal can be repaired to achieve the repeat effect, but the CAN signal will be delayed by 175ns at the same time, so the communication distance will not be extended and will be shortened by about 35 meters. Therefore, the focus of I-7531-FD-G is isolate two CAN networks with the same CAN baud rate, rather than extending the communication distance. If you need to extend the communication distance of CAN signal, you can refer to I-7532M-FD.

(2022/11/29, Bao)

### Q3 · How many CAN nodes can the I-7531-FD-G drive? (2022/11/29, Bao)

A: Since the driving ability of the CAN bus is related to the design of various CAN transceiver ICs, if the CAN bus on site is connected to CAN products from different companies, the driving ability of the I-7531-FD-G is recommended to be based on the actual test on-site. In addition, if the on-site CAN bus is connected to ICP DAS's CAN products, taking ICP DAS's CAN boards as CAN nodes for an example, the I-7531-FD-G can drive 100 CAN nodes.

(Note) One set of PISO-CAN800U-D has 8 CAN ports, so it can simulate 8 CAN nodes. If all 14 sets of CAN ports of PISO-CAN800U-D are connected in daisy chain, a total of  $8 \times 14 = 112$  CAN nodes can be simulated.

(2022/11/29, Bao)



## Q4 · How to set or customize CAN baud rate for I-7531-FD-G? (2022/11/29, Bao)

A: I-7531-FD-G automatically detects the CAN baud rate by the hardware, so the user does not need to set it.

(2022/11/29, Bao)