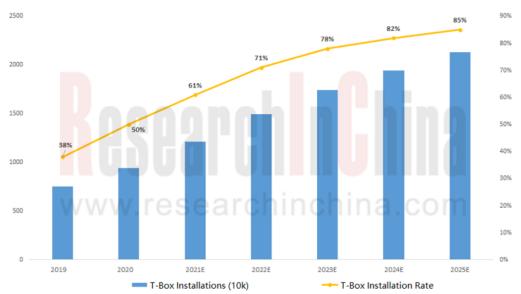


In 2020, passenger car T-Box increased by 25.4% year-on-year, and the proportion of 5G T-Box jumped

ResearchInChina released Global and China Passenger Car T-Box Market Report 2021, analyzing and predicting T-Box technology and market trends, as well as conducting research on mainstream T-Box vendors at home and abroad.

In 2020, 9.404 million passenger cars (50.0% of the total) were installed with T-Box by OEMs in China, a year-on-year increase of 25.4%. By 2025, the OEM T-Box installation rate of passenger cars in China will reach 85%, and over 20 million passenger cars will be installed with T-Box.

T-Box Installations of Passenger Cars in China, 2019-2025



Source: ResearchInChina

China's passenger car T-Box market is highly concentrated. Top 5 companies enjoy 45.6% market share and Top 10 companies 70.7%. The top vendors include LG Electronics, Valeo, Denso, LANYOU Technology, Continental, ECARX, Jingwei Hirain Technologies, etc. The first-ranked LG Electronics sees T-Box in 1.16 million vehicles, mainly serving GM, Lynk & Co, Kia, Hyundai, Geely, FAW Hongqi, etc.; its T-Box factory is located in Kunshan of Jiangsu.

DFS Industrial Group owns 80% stake in LANYOU Technology whose networked equipment model is TCU GEN2-A 4G. More than 90% of its T-Box products are available in Dongfeng's models, such as Dongfeng Motor, Dongfeng Renault, Dongfeng Venucia, Dongfeng Nissan, etc.

Jingwei Hirain Technologies installed TBOX-Ext 4100 in 369,000 vehicles of FAW, JMC, GAC NE, Ford, Shanghai GM, etc. in 2020.

With the popularization and development of Telematics, T-Box is developing towards hardware integration and diversified functions. T-Box will not only collect, clean, sort, store, process and forward data, but also closely coordinate calculations with related functional components to reduce redundancy, improve efficiency, and enhance safety so as to achieve the effect of 1+1>2. For example, it integrates central gateway, 5G, C-V2X, high-precision positioning, vehicle FOTA, etc.



As of May 2021, China had issued network access licenses for 368 T-Box products, of which 9 models from Lear, Datang Gohigh, Neusoft, DIAS, YF Tech, and China Mobile IoT support 5G networks. At the Shanghai Auto Show, VanJee Technology, Joynext, and Huawei also exhibited 5G C-V2X T-Box.

T-Box Products That Have Been Granted Network Access Licenses and Support 5G Networks

T-Box vendors	Valid until	Device model	
Lear	September 2021	CB20CHN08	
Datang Gohigh	June 2021	VU3005	
	September 2021	VU4105	
	September 2021	VU4005	
Neu <mark>soft G</mark> roup	July 2021	CCM2008TB	
DIAS	June 2021	DIAS automotive wireless terminal j- BOX	
Joynext	September 2021	VBOX 5G	
YF Tech	September 2021	VE70053300	
China Mobile IoT	September 2021	CR05	

Source: Ministry of Industry and Information Technology of China

5G C-V2X T-Box at Shanghai Auto Show, 2021









Domestic and foreign OEMs are actively launching 5G models. The 5G models on the market include BAIC ARCFOX αT , BMW iX, Buick GL8 Avenir, etc. The upcoming models embrace SAIC Roewe MARVEL R, Great Wall HAVAL H6, Great Wall WEY Mocha and so on.

Models with 5G/C-V2X/High-precision Positioning in China, 2020-2021

Release time	Models	5G technology	V2X	High- precision positioning	Current status	Note
October 2020	BAIC ARCFOX αT	√ Huawei	I	1	Launched	1
November 2020	BMW iX	√ Designed by Harman, manufactured/packaged by BYD	1	1	Launched	The world's first mass- produced car using 5G modules
December 2020	Buick GL8 Avenir	,	√ Qualcomm 9150 LTE-V2X chipset	′	Launched	The first mass-produced model equipped with V2X technology
December 2020	Hongqi EHS9	aan	√ Neusoft C-V2X smart antenna	/	Launched	
February 2021	SAIC Roewe MARVEL R	√ Huawei	√ Huawei	/	Unlaunched	1
March 2021	HiPhi X	√ Snapdragon automotive 5G platform	√ Snapdragon automotive 5G platform	√ Snapdragon automotive 5G platform	Launched	,
April 2021	GAC Aion V	√ Automotive terminals of Jingwei Hirain Technologies; Huawei's modules	٧	√ RTK of Qianxun SI, centimeter accuracy	Launched	The world's first 5G +V2X mass-produced smart car with Beidou high-precision positioning
April 2021	Great Wall HAVAL H6	√ Neusoft's automotive terminals, Qualcomm Snapdragon's modules	1	1	Unlaunched	1
April 2021	Great Wall WEY Mocha	√ Snapdragon automotive 5G platform	√ Snapdragon automotive 5G platform	√ Snapdragon automotive 5G platform	Unlaunched	1
April 2021	WM W6 X Special Edition	√ Qualcomm Snapdragon	/	/	Launched	1

Source: ResearchInChina



This report analyzes main T-Box vendors at home and abroad:

T-Box vendors included in Global and China Passenger Car T-Box Market Report, 2021

Global vendors	Chinese vendors				
LG Electronics	LANYOU Technology	Shanghai Changxing Software	Yaxon Network	Sofar	
Denso	Flaircomm Microelectronics	ECARX	Gosuncn	Sinocastel	
Continental	THREAD	PATEO	Sirun	IN+	
Valeo	Jingwei Hirain Technologies	hh-tech.net	iGentAl	VanJee Technology	
Harman	Huawei	Intest	Yuwei	Joynext	
Visteon	Neusoft	Soling	DiNA Technology	OTT	
Bosch	Desay SV	BDStar Navigation	kpocom		
Ficosa	UCIT	Hopechart	Shenzhen Full-join Technology		



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- 3.7 BYD: New Version of BYD Auto APP (Released in April 2021)
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