





RE^{liable} neX^t GEN^{eration}

data computing



Reliable

- Robust IP65 enclosure
- Industrial temperature specification
- With 1000's of hours of rigorous in-field testing



Secure

- Reliable non-removable eMMC data storage
- Fixed device mounting positions



Accurate

- Micro Sec timestamped data
- No message loss, over 20000 messages per second



Data

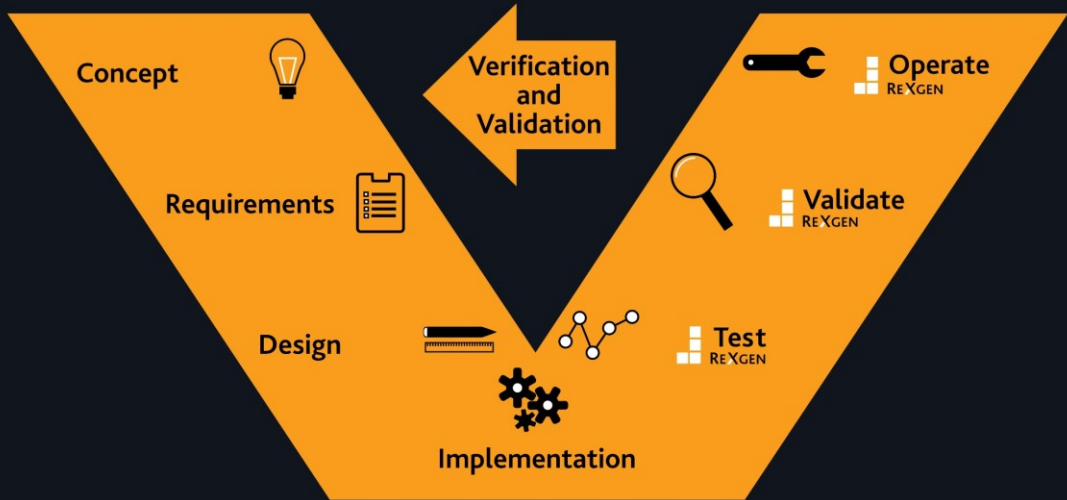
- 2x CAN buses or CAN FD buses, 1x LIN bus
- 2x Digital or PWM inputs, 2x Analogue inputs
- Integrated IMU sensors:
GNSS, 3D Accelerometer and 3D Gyro



Trust

- Reliably wakes up from multiple sources and records every-time!
- WakeOnCAN feature
- WakeOnMovement feature
- WakeOnSignal feature

RE^{liable}ne^{xt}GEN^{eration} data computing



When data is critical, and messages
just cannot be missed...

We recognise the importance of **Data Security** and every detail of the ReXgen has been considered to ensure the ReXgen can be trusted in CAN networks.

Next generation data computing, capturing data throughout your product's life cycle.

We designed the ReXgen to be fitted on your product during development and eventually even production, capturing continuous data and events.

The ReXgen is essential to identify problems and has built in features to handle sensitive data.

- ReXgen can be securely mounted in position.
- Data is stored securely on non-removable embedded eMMC.
- Data encryption supported.

Fast and easy to configure, record and retrieve data via USB. Our easy to use and freely distributable software application ReXdesk can be downloaded from our website.



REXGEN 2

Reliable, Secure, Accurate
data computing that you can trust

Key features

- 2x CAN 2.0/CAN FD buses, 1x LIN bus
- 2x Digital Input channels, 2x Analogue Input channels
- Powerful open source graphic interface application tool
- Data exportable in open formats MDF4, Matlab and CSV
- Up to 16GByte eMMC storage -security data
- Micro USB 2.0 -Higher speed connection to logger
- CAN trace exportable in ASC and BLF format
- Very low power consumption in sleep mode and WakeOnCAN or WakeOnSignal feature
- CAN frame error detection
- ASAM MDF(*.mf4 format)
-international standard data format
- LEDs support status indication
- IP65 enclosure protection
- Easily stackable and installable
with 4 multi functions screws
- Plug and play



*P/N: INF2110 (8GB), INF2111 (16GB)



Hardware Versions

Current Range (Non-modular)



REXGEN 2 8GB



REXGEN 2 16GB

The Influx ReXgen 2 is one of the smallest, compact, robust and powerful handheld flight data recorder available in the market today.

Targeted at applications that require a CAN 2.0, CAN FD and LIN flight data recorder and also a data computer.

Supplied with ReXdesk, freely distributable ReXgen data logger configuration and data view application for Windows®.

*Automotive customized connector is also available



REXGEN 2 IMU

Reliable, Secure, Accurate
data computing that you can trust

Key features

- 2x CAN 2.0/CAN FD buses, 1x LIN buses
- 2x Digital Input channels, 2x Analogue Input channels
- Powerful open source graphic interface application tool
- Data exportable in open formats MDF4, Matlab and CSV
- 32GByte eMMC storage -security data
- Micro USB 2.0 -Higher speed connection to logger
- CAN trace exportable in ASC and BLF format
- Very low power consumption in sleep mode and WakeOnCAN or WakeOnSignal feature.
- CAN frame error detection
- ASAM MDF(*.mf4 format)
-international standard data format
- LEDs support status indication
- IP65 enclosure protection
- Easily stackable and installable with 4 multi functions screws.
- Up to 18Hz GPS rate/u-Blox -Support 4 position systems highly accurate positioning
- Gyro and Accelerometer system
- Positioning even in bad GNSS signal conditions
- Plug and play

Hardware Versions

Current Range (Non-modular)



REXGEN 2 IMU
32GB GNSS



REXGEN 2 IMU
32GB GNSS
(*Dead reckoning)

*Future version.



*P/N: INF2112, INF2113 (Dead reckoning)



The ReXgen 2 IMU is the upgrade version of ReXgen 2 which also supports GNSS, Gyro and Accelerometer.

Targeted at applications that require a CAN 2.0, CAN FD and LIN flight data recorder, and at the same time require vibration information and position information even under very harsh environments that no GPS signal is available, for instance, sharing cars and motorcycle data recording, or off-road vehicle data logging.

Supplied with ReXdesk, freely distributable ReXgen data logger configuration and data view application for Windows®.

*Automotive customized connector is also available

Functions	ReXgen 2	ReXgen 2 IMU
CAN Interfaces	2 x CAN 2.0/CAN FD	
	ISO 11898-1: Compliant with CAN (up to 1 Mbit/s)	
	ISO & Bosch CAN FD (up to 8 Mbit/s)	
	Conforms to CAN protocol version 2.0 - part A, B	
	Max 20000 mps	
	CAN frame error detection	
	Meets the requirements of ISO 11898-2:2016 & ISO 11898-5:2007 physical layer standards	
CAN/CAN FD Functions	Supports custom baud rates	
	Supports CAN/CAN FD Bit timing selection	
	SAE J1939 support (Source Address, Destination Address & PGN Filters)	
	Silent Mode Configurable	
	CAN DBC Support	
Supported Protocols	CAN Monitoring (RAW CAN signals, SAE J1939 support)	
LIN Interface	1 x LIN (up to 20k Baud with LIN-Compatible Output Driver)	
PC Interfaces	Rugged Micro USB 2.0	
LEDs	2 x LEDs	
Data Storage Format	FAT32, Log files accessible via ReXdesk software	
File Format Supported	ASAM MDF (*.mf4), CSV, MATLAB, ASC, BLF	
Data Logger Configuration	Supplied with Influx ReXdesk configuration software, XML based	



Technical (Continued)

Functions	ReXgen 2	ReXgen 2 IMU
Data Storage Capability	8 or 16 GB Inbuilt eMMC storage	32 GB Inbuilt eMMC storage
GNSS	None	Up to 18 Hz rate
Position accuracy	None	2.5 m (GPS)/(GPS & GLOSNASS & BDS)
	None	4m (GLONASS)
Accelerometer	None	$\pm 2/\pm 4/\pm 8/\pm 16$ g full scale
Gyroscope	None	$\pm 125/\pm 250/\pm 500/\pm 1000/\pm 2000$ dps full scale
Triggering	Trigger on CAN ID, CAN Signal, Digital Input.	
	Trigger on DM1 counter.	
	Analogue Input	
Number of channels	2x bipolar single-ended inputs	
Range	± 10 V	
Resolution (ADC)	12 Bit	
Max sampling rate	1 kHz	
Input Impedance	> 50 K Ohms	
Safe Applied Voltage	± 28 V	
	Digital Input	
Number of channels	2 x unipolar single-ended inputs	
Input Switching Thresholds	Low < +0.8 V, High > 2.5 V (up to 28V)	
Safe Applied Voltage	± 28 V	

Functions	ReXgen 2	ReXgen 2 IMU
Transceiver Protection	Bus fault protection: ± 58 V	
	Support thermal-shutdown protection (TSP)	
	Under-voltage protection	
Enclosure	PC+ ABS	
Mountability	4 Mounting screws	
Stackability	Stackable with 4x mounting screws	
IP Rating	IP65	
Dimension	L - 100 mm, W - 73.5 mm, H - 27.4 mm (Without cable)	
	L - 325 mm, W - 73.5 mm, H - 27.4 mm (With cable)	
Environmental	Work temperature -40degC to +85degC; Humidity max 90%	
Weight	164g (REXGEN 2); 171g (REXGEN 2 IMU)	
Power Saving	Wake Up On CAN, Power Down Mode, Sleep Modes	
	Wake Up On Movement	
Power Consumption	Normal Operation: 87 mA at 12 V	
	Power Down Mode: <2 mA	
Bus & Signals	Operating Voltage	
Power supply - OBD	+4.5 to +31V	
Power supply - USB	+4.5 to +5.5V	
CAN FD	+2 to +3V	
LIN	0 to +24V	



REXDESK

Configure logger and retrieve data

ReXdesk is our freely distributable configuration and general-purpose software tool to work with the ReXgen. Designed to make CAN bus data logging easier.

ReXdesk supports multiple DBC files enabling configurations that includes filters and log on parameter values. Freely distributable, ReXdesk can be downloaded from our website.

- Supports industry standard DBC files.
- Supports CAN and CAN FD (both ISO and non-ISO)
- Supports standard and extended messages.
- Triggers, on parameter value or CAN Identifier.
- J1939 Identifier formatter and DM1.
- CAN error logging and Live CAN trace viewer
- Fast data retrieval and export to other format files.
- Software Operating System: Windows



Navigation bar

Navigates to the majority of the program features



Live data window

Enables live monitoring of can traces



Configuration panel

Comprises of the available Bus options, Toolbar, SD card and live monitoring options



Status bar

Displays key pieces of information regarding the data logger



USB Live view

Allow user to Enable disable USB and live data



SD Card

Configure maximum log file time or file size



J1939 Filtering

Configure J1939 filtering for source address, Destination address and PGN filtering



Dig in

Set digital channel sampling rate and active state for configuring digital bus



Library window

Enables to import DBC file and filter parameters



Trigger window

Enables to create, edit and delete trigger



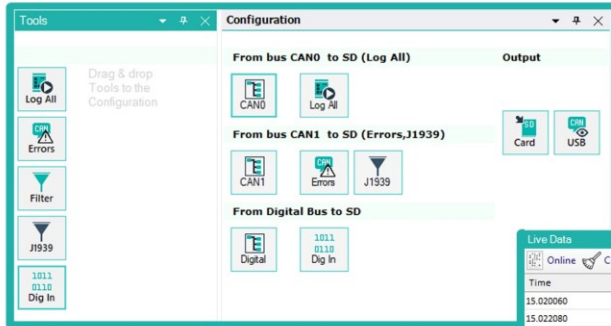
Show data log window

Displays the logged can trace .Rxd data. Allows user to export the loaded data to .mf4, .csv, mat, asc, .xml, rxd format



Internal storage window

Displays all the files currently stored on the Data Logger memory



Tools Configuration

Drag & drop Tools to the Configuration

From bus CAN0 to SD (Log All) Output

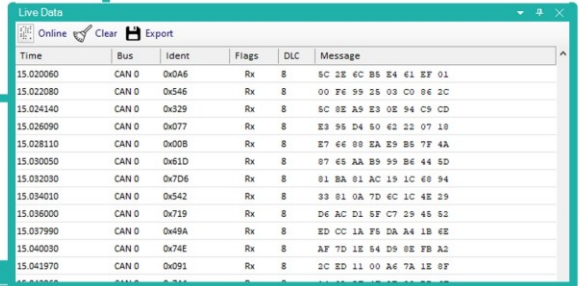
From bus CAN1 to SD (Errors,J1939)

From Digital Bus to SD

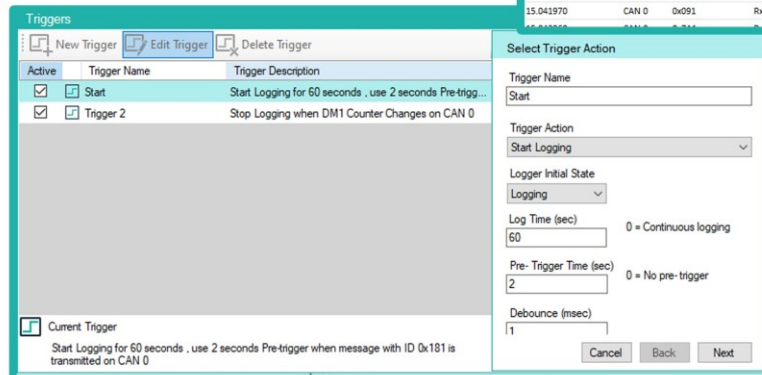
SD Card USB

Tools and Configurations

Live Data and Trace View



Time	Bus	Ident	Flags	DLC	Message
15.020060	CAN 0	0x0A6	Rx	8	5C 2E 6C B5 E4 61 EF 01
15.022080	CAN 0	0x546	Rx	8	00 FE 99 25 03 C0 86 2C
15.024140	CAN 0	0x329	Rx	8	5C 0E A9 E3 0E 94 C9 CD
15.026090	CAN 0	0x077	Rx	8	E3 96 D4 50 62 22 07 19
15.028110	CAN 0	0x00B	Rx	8	E7 66 08 2A E9 B5 7F 4A
15.030050	CAN 0	0x61D	Rx	8	97 65 AA B9 99 B6 44 5D
15.032030	CAN 0	0x7D6	Rx	8	91 BA 01 AC 19 1C 68 94
15.034010	CAN 0	0x542	Rx	8	33 01 0A 7D 6C 1C 4E 29
15.036000	CAN 0	0x719	Rx	8	D6 AC D1 5F C7 29 45 52
15.037990	CAN 0	0x49A	Rx	8	ED 0C 1A F5 DA AA 1B 6E
15.040030	CAN 0	0x74E	Rx	8	AF 7D 1E B4 D9 0E FB A2
15.041970	CAN 0	0x091	Rx	8	2C ED 11 00 A6 7A 1E 8F



Triggers

New Trigger Edit Trigger Delete Trigger

Active	Trigger Name	Trigger Description
<input checked="" type="checkbox"/>	Start	Start Logging for 60 seconds . use 2 seconds Pre-trigg...
<input checked="" type="checkbox"/>	Trigger 2	Stop Logging when DM1 Counter Changes on CAN 0

Current Trigger

Start Logging for 60 seconds . use 2 seconds Pre-trigger when message with ID 0x181 is transmitted on CAN 0

Select Trigger Action

Trigger Name

Start

Trigger Action

Start Logging

Logger Initial State

Logging

Log Time (sec) 0 = Continuous logging

60

Pre-Trigger Time (sec) 0 = No pre-trigger

2

Debounce (msec)

11

Cancel Back Next

Trigger Setting

ROADMAP IN 2021



GNSS
+
LTE



GNSS
+
Bluetooth



GNSS
+
Wi-Fi

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