2023 V1.3

RE liable ne X t GEN eration

data computing

Reliable

– Robust IP65 enclosure

– Industrial temperature specification

– 1000s 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, 1xLIN bus

– 2x Digital or PWM inputs, 2x Analog inputs

– Integrated IMU sensors: GNSS, 3D Accelerometer and 3D Gyro

Trust

– Reliably wakes up from multiple sources and records every-time!

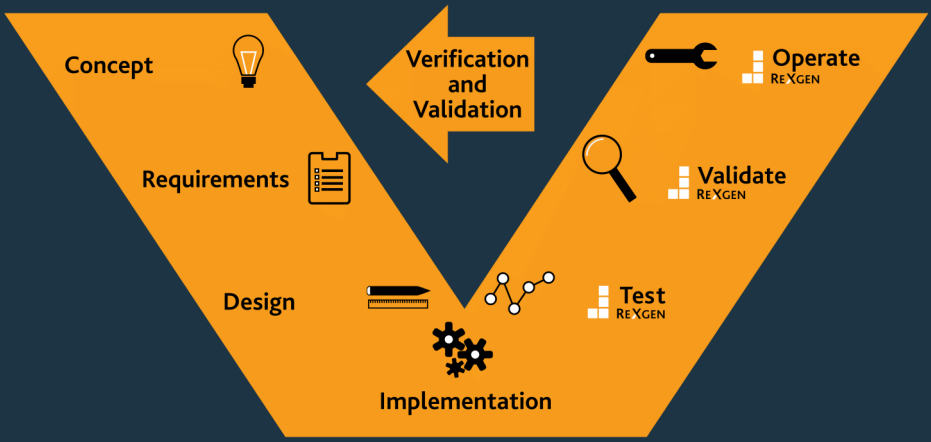
– WakeOnCAN feature

– WakeOnAlarm feature

– WakeOnSignal feature

RE liable ne X t GEN eration

data computing



Capturing critical CAN data and messages

The ReXgen 2 is designed to be fitted during development through to production, capturing continuous data and events.

The ReXgen 2 is a compact, accurate, cost effective , 2x CAN datalogger with pass-thru. Suitable for automotive and various industrial applications.

- Supports J2534 (Pass-thru)
- Logs data reliably, for hours, from a CAN bus
- Saves your data to the embedded eMMC
- IP65 enclosure
- Easily mounted and integrated with your vehicle /machine

Influx ReXgen 2

Key features

- 2x CAN 2.0/CAN FD buses, 1x LIN bus
- 2x Digital Input channels, 2x Analog Input channels
- Powerful graphic interface application tool
- Supported Data formats -ASAM MDF4 MATLAB (.mat), CSV, ASC, BLF & TRC
- Up to 16GByte eMMC storage
- Micro USB 2.0 -High speed connection to logger
- Functions as an interface device and supports J2534 (Pass-thru)
- Supports CAN monitoring RAW CAN signals, SAE J1939
- Very low power consumption in sleep mode and WakeOnCAN, WakeOnAlarm & WakeOnSignal
- CAN frame error detection ASAM MDF(*.mf4 format) - international standard data format
- LEDs support status indication
- IP65 enclosure protection
- Plug and play, easily stackable and installable

Hardware Versions

Current Range (Non-modular)

REXGEN 2 8/16 Gb

ReXgen2

Reliable, Secure, Accurate data computing that you can trust

***P/N: INF2110.01/INF2110.02**

The Influx ReXgen 2 is a small, robust and powerful CAN bus data recorder.

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

Supplied with ReXdesk, freely distributable software for the ReXgen 2. used for logger configuration and file exporter.

*Automotive customized connector is also available

Influx
ReXgen 2 IMU

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 Analog Input channels
- Powerful graphic interface application tool
- Supported Data formats -ASAM MDF4 MATLAB (.mat), CSV, ASC, BLF & TRC
- Up to 32GByte eMMC storage
- Micro USB 2.0 -Higher speed connection to logger
- Functions as an interface device and supports J2534 (Pass-thru)
- Supports CAN trace monitoring RAW CAN signals, SAE J1939
- Very low power consumption in sleep mode and WakeOnCAN, WakeOnAlarm & WakeOnSignal.
- CAN frame error detection ASAM MDF(*.mf4 format) -international standard data format
- LEDs support status indication
- IP65 easily stackable and installable enclosure
- Up to 18Hz GNSS rate/u-Blox -Supports 4 position systems for highly accurate positioning
- Gyro and Accelerometer system

Hardware Versions

Current Range (Non-modular)

REXGEN 2 IMU 16/32GB GNSS

***P/N: INF2112.02/INF2112.03**

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

A device which can also record vibration information and position information, in very harsh environments, even if no GPS signal is available.

Logs data continuously for hours from a CAN bus and simultaneously saves it to the embedded SD memory card.

Supplied with ReXdesk, freely distributable software for the ReXgen 2. used for logger configuration and file exporter.

*Automotive customized connector is also available

Influx
REXGEN 2

Technical Specifications

Functions	ReXgen 2	ReXgen 2 IMU
CAN Interfaces	2 x CAN/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 Meets the requirements of ISO 11898-2:2016 & ISO 11898-5:2007 physical layer standards	
CAN/CAN FD Functions	Supports custom baud rates CAN/CAN FD Bit timing selection SAE J1939 support (Source Address, Destination Address & PGN Filters) Silent Mode Configurable CAN DBC Support CAN frame error detection	
LIN Interface	1 x LIN (up to 20 K Baud with LIN-Compatible Output Driver)	
Inputs	2 x Digital and 2 x Analog (max sampling rate-1KHz)	
	Positioning & IMU Sensors	
GNSS	NA	Up to 18 Hz rate
GNSS Receiver Type	NA	72-channel, GNSS L1C/A, SBAS L1C/A, QZSS L1C/A, QZSS L1-SAIF, GLONASS L1OF, BeiDou B1I, Galileo E1B/C
Position Accuracy	NA	2.0 m CEP*
Acquisition	NA	Cold starts: 26s Reacquisition: 2 s
Antenna	NA	External
Accuracy	NA	Velocity: 0.05m/s
		Heading: 0.3 degrees
		Altitude: not specified
Accelerometer	NA	±2/±4/±8/±16 g full scale (max sampling rate-1KHz)
Gyroscope	NA	±125/±250/±500/±1000/±2000 dps full scale (max sampling rate-1KHz)

Influx ReXgen 2

Technical Specifications (Continued)

Functions	ReXgen 2	ReXgen 2 IMU
PC Interfaces	Rugged Micro USB 2.0 (Datalogger mode and J2534)	
Data Storage Capability	8 or 16 GB Inbuilt eMMC storage	16 or 32 GB Inbuilt eMMC storage
Supported Protocols	CAN Monitoring (RAW CAN signals, SAE J1939 support)	
LEDs	2	
Triggering	Trigger on CAN ID, CAN Signal, and Digital Input. Trigger on DM1 counter.	
Data Storage Format	Log files accessible via ReXdesk Software	
File Format Supported	ASAM MDF (.mf4), Peak TRC, CSV, MATLAB, ASC, BLF	
Data Logger Configuration	Supplied with Influx ReXdesk configuration software, XML based	
	Analog Input	
Number of channels	2 x 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	

Influx REXGEN 2

Technical Specifications (Continued)

Function	Description
Transceiver Protection	Bus fault protection: ±58 V Thermal-shutdown protection (TSD) Under-voltage protection
Enclosure	PC+ ABS
IP Rating	IP65
Dimension	L - 100 mm, W - 73.5 mm, H – 27.4 mm
Weight	164 gms
Mounting Holes	4 mounting holes and screws
Stackable	Yes
Environmental Tolerance	**Working temperature** -40degC to +85degC; **Humidity** max 90%
Power Saving	Wake Up On CAN, Power Down Mode, Sleep Modes
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
Digital Input	0 to +28V
Analog input	± 10V

lin
CAN
Errors
J1939
Accel
Analog
0101
Live
Encrypt
Influx
REXDESK
GNSS
Gyro
Run
Filter
Sleep
1011
0110
Dig In
CAN
Periodic Message Transmission
Log All
CAN
Periodic
Digital

Influx REXDESK

REXDESK

Configure logger and retrieve data

ReXdesk is our freely distributable configuration and file exporter software tool to work with the ReXgen series. Designed to make CAN bus data logging easier.

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

- Triggers—on parameter value or CAN Identifier
- Supports Command Line Interface
- ReXdesk convert application available
- Supports J1939
- CAN error logging and Live CAN trace viewer
- Fast data retrieval and export to other file formats
- Compatible Operating System: Windows
- Supports industry standard DBC files
- Supports standard and extended messages

User Friendly GUI

Easy drag 'n' drop user interface

Live Data Window

Live monitoring of CAN traces

Filter

Filter CAN bus data, using DBC file

CAN

Configure the CAN bus

USB Live View

Allows users to view live data

J1939

Configure J1939 filtering for source & destination address

Digital In

Digital inputs with a maximum sampling rate of 1KHz

Import DBC

Import DBC files and filter parameters

Trigger Window

Create, edit and delete trigger

Log All

Provides the logged data as a Rxd file. Export the data to multiple formats

Internal Storage

Displays all the files currently stored on the logger's memory

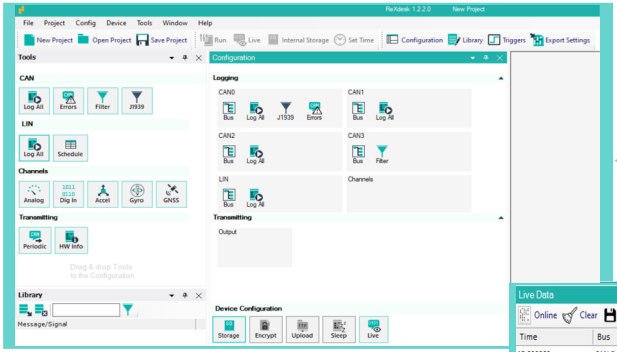
More

Find more functions on our website

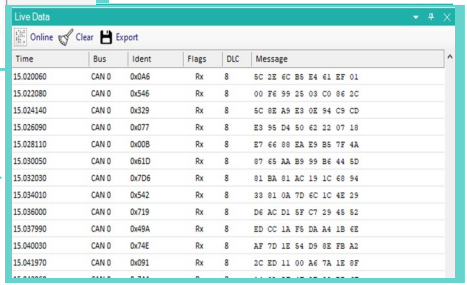
Influx
REXDESK

REXDESK

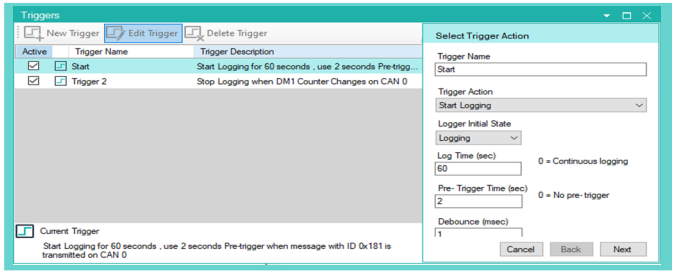
Configure logger and retrieve data



Tools and Configurations



Live Data and Trace View



Multiple Trigger Settings

Influx Technology Ltd

sales@influxtechnology.com

www.influxtechnology.com

Influx
REXGEN 2

Price and specification are correct at date of publication but subject to availability or change without notice. Photos for illustrative purposes only - actual items may differ from photo. Influx Technology Ltd cannot be responsible for errors in typography or photography.

All copyrights reserved @2023