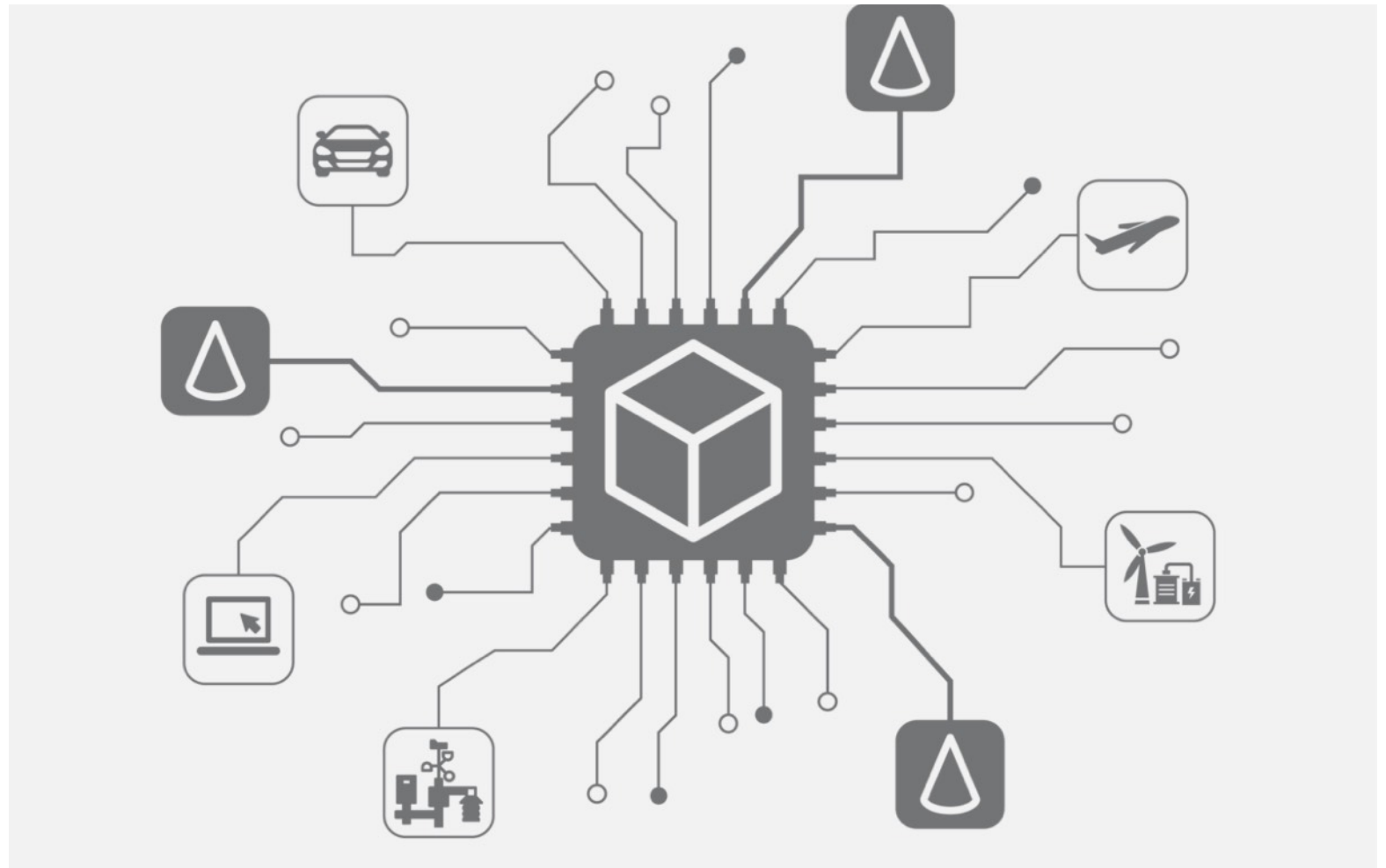




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A simple to use, automatic data collection and transport utility with a small system footprint that supports raw-data collection from Industrial IoT, enterprise ICT, web applications, weather and environmental devices.

# KRONOMETRIX

## IoT GATEWAY

# EASY PLUG-IN

Kronometrix IoT Gateway is a software package, designed for ARM architecture, single board computers, like Raspberry PI. It contains all needed components to connect, record and transport different data from ICT applications, services to IoT sensors and devices. Includes:

- the operating system
- data recording module
- transport utilities and configurations

The original recorded data is temporarily stored on the gateway, for backup

purposes, up to 90 days, at the same time delivered to [Kronometrix SaaS](#), for analysis and visualization. The gateway includes, by default a number of data recorders, specific for different jobs and responsibilities. The recorders are light software probes running and fetching data from various sources using several communication protocols.

*With a small system footprint  
Kronometrix IoT Gateway is easy  
to configure and operate, fetching  
data from various devices*

Based on [open-source software](#), is simple to connect and manage, using the SSH2 standard secure communication protocol. You can use TCP or Serial connection to manage Kronometrix IoT Gateway.

## TECHNICAL SPECIFICATIONS

**Hardware** [Raspberry PI 3B+, 4B\\*](#)

**Connectivity** RS-232, RS-485, USB, RJ45, 802.11b/g/n

**Protocols** TCP, UDP, HTTP, HTTPS, SNMP, SERIAL ASCII POLLED

MODBUS-RTU, MODBUS-ASCII, MODBUS-TCP, BACNET\*

**Sampling rate** Default 60 seconds, configurable

**Realtime Clock** [NXP PCF2129](#)

**Installation** Bootable software image compatible MicroSDXC 64GB



It keeps track of essential performance, availability and inventory metrics from web applications, operating systems, enterprise services or several IoT sensors. The gateway is offering immediate access to raw data and transport utility services for [Kronometrix SaaS](#) or 3rd parties.

You can easily connect Kronometrix IoT Gateway to your private, internal network, using a cable based or wireless network, with a dynamic or static IP address to start immediately to collect data from your applications and sensors. Using simple, commodity MicroSD memory cards, the raw data is always available to access, or recover, if necessarily.

## Advantages

Everything ready and configured to connect and record data from web applications, indoor air quality sensors, industrial IoT devices, or other weather, and environment sensors, using standard connectivity protocols. From environmental air quality to ICT enterprise and industrial IoT, Kronometrix IoT Gateway is the most cost effective solution to collect and transport data.

# FEATURES

## RECORDERS

### OPERATING SYSTEM

- **sysrec** - Overall system performance
- **cuprec** - Per CPU data recorder
- **diskrec** - Per disk data recorder
- **nicrec** - Per NIC data recorder
- **hdwrec** - System inventory data recorder
- **procrec** - Process/Task data recorder
- **faultrec** - Fault Management data recorder \*

### NETWORK MANAGEMENT

- **snmprec** - Ethernet and SAN Switch \*
- **netrec** - TCP, UDP data recorder

### INTERNET SERVICES

- **certrec** - X.509 certificate recorder
- **direc** - Per directory recorder
- **svcrec** - IMAP, SMTP, POP3, HTTP, TCP(Any), UDP
- **ntprec** - NTP server recorder
- **sockrec** - TCP, UDP IT Socket data recorder \*
- **imaprec** - IMAP server data recorder \*

## MIDDLEWARE

- **httprec** - NGINX, Apache, Tomcat, PHP-FPM HTTP/HTTPS server analyser
- **dbrec** - MariaDB, MySQL, PostgreSQL, Redis \*
- **jvmrec** - Java VM memory statistics
- **webrec** - HTTP/HTTPS response time analyser

## INDUSTRIAL IoT

- **axisrec** - AXIS security and video surveillance data recorder
- **bacrec** - Building management BACnet data recorder \*
- **blrec** - Bluetooth Low Energy data recorder \*
- **rs485rec** - Industrial RS-232, RS-485, MODBUS data recorder
- **wsrec** - General weather station recorder RS-232/USB



The term Data Source ("DS", "ds") means any system connected to a public or private network with a valid IPv4 or IPv6 address being a server, a data logger, a graphic workstation, an iPad or a sensor bound to a single Kronometrix data subscription.

# COMPATIBILITY LIST - 1/2

## ENVIRONMENT

<b>AirThings WavePlus</b>	Indoor Air Quality humidity, air temperature, TVOC, RADON	BLE 4.2 (BETA)
<b>Tongdy Sensing Technology IAQ-G01</b>	Indoor Air Quality, humidity, air temperature, CO2, VOC	Modbus-RTU
<b>Tongdy Sensing Technology MSD-1618</b>	Indoor Air Quality, humidity, air temperature, CO2, TVOC, PM2.5, PM10	Modbus-RTU
<b>Tongdy Sensing Technology MSD-0918</b>	Indoor Air Quality, humidity, air temperature, CO2, CH2O, TVOC, PM2.5, PM10	Modbus-RTU
<b>Vaisala GMW95</b>	CO2, Temperature and Humidity Transmitter	Modbus-RTU
<b>Vaisala AQT420</b>	Air quality Transmitter NO2, SO2, CO, O3, humidity, air pressure and temperature, PM2.5 and PM10	Modbus-ASCII

## WEATHER

<b>Fine Offset Electronics WH-1080</b>	Non automatic weather station	Serial
<b>Vaisala QML201C</b>	Data Logger	HTTP, Serial
<b>Vaisala HMP155</b>	Humidity and Temperature Probe HMP155	Serial
<b>Vaisala WXT530</b>	All-in-one weather transmitter, rain, wind, temperature, humidity, air pressure	Serial

## SECURITY VIDEO SURVEILLANCE

<b>Axis Communications Q1615-E MkII</b>	High-speed outdoor network surveillance camera	HTTP/HTTPS
<b>Axis Communications Q6052-E PTZ</b>	Outdoor-ready PTZ with 36x zoom, focus recall and Lightfinder	HTTP/HTTPS

# COMPATIBILITY LIST - 2/2

## INDUSTRIAL AUTOMATION

<b>Phoenix Contact</b>	QUINT-UPS 24	Modbus-RTU
<b>SferaLabs Strato Pi Mini Board</b>	Power supply, with surge and reverse polarity protection and realtime clock	Raspberry PI 3B,3B+,4
<b>SferaLabs Strato Pi Base Board</b>	Power supply, with surge and reverse polarity protection, realtime clock and RS-232, RS-485	Raspberry PI 3B,3B+,4
<b>SferaLabs Strato Pi UPS Board</b>	Power supply, realtime clock, RS-232, RS-485, integrated uninterruptible power supply, with external lead-acid 12V battery	Raspberry PI 3B,3B+,4

## MEMORY CARDS

<b>Transcend High Performance 330S</b>	64GB MicroSDXC memory card	A2, V30, U3
<b>Transcend High Endurance</b>	64GB MicroSDXC memory card	UHS-I U3 / C10
<b>Transcend Ultimate 633x</b>	64GB MicroSDXC memory card	UHS-I U3 / C10
<small>RECOMMENDED</small> <b>SanDisk High Endurance</b>	64GB MicroSDXC memory card	V30, UHS-I U3
<b>SanDisk Extreme Plus</b>	64GB MicroSDXC memory card	A2, V30, U3
<b>SanDisk Extreme Pro</b>	64GB MicroSDXC memory card	A2, V30, U3

## CABLES AND AUXILIARES

<b>FTDI Chip USB-RS485 Converter Cable</b>	FT232R	USB RS485
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# PRICING

**Kronometrix IoT Gateway** is available as a software image, compatible with Raspberry PI 3B/3B+ single-board computers. Includes 30 days installation and support, followed by 1 year software updates. Additional maintenance and support packages can be purchased from [sales@kronometrix.com](mailto:sales@kronometrix.com)

ITEM	DESCRIPTION	TYPE	PRICE	
	Kronometrix IoT Gateway Software Image for ARM64 computers and chips	Perpetual	<b>279 €</b> <small>/ IoT Gateway</small>	
<b>IoT Gateway</b>	Connect and get data from any sensors, devices, or data-sources	Included		
	Unlimited number of data-sources	Included		
	One-Time fee	Standard Support 8x5 Monday to Friday, including email, phone. SLA: 24 hours		Included
	Standard support	Up to 10 Incident cases per month		Included
		Remote access to check and maintain your Kronometrix IoT Gateway installation	Optional	
<b>Premium support</b>	Premium Support 24x7, including email, phone, video chat. SLA: 6 hours	Annual Commitment	<b>90 € /month</b>	
	Up to 100 Incident cases per month			
	Remote access to check and maintain your Kronometrix IoT Gateway installation			
<b>Industrial projects</b>	Integrate and deploy Kronometrix IoT Gateway to other industrial systems and configurations	T&M basis		

Please note that the prices are exclusive of value added tax. For large installations, please [contact us](#) for more information.

Annual Commitment: the period of time you plan to use the product or service, minimum 1 year. You can cancel anytime, but you need to pay up to 1 year. Billed every month.