IoT Edge Gateways

Sensing always and everywhere

Gateways are emerging as a key element of bringing legacy and next generation devices to the Internet of Things (IoT). Decode IoT gateways integrate protocols, help manage storage and edge analytic of the data, and facilitate data flow securely between edge devices and the cloud.

Decode gateways are built on Linux operating system. The new DG100 gateway, uses high performance and modular macchina.io framework to deliver web-enabled, programmable and secure IoT platform.

DECODE

DG100 IoT Edge Gateway

DG100 is compact and efficient Multi-service IoT Edge Gateway for home, office and light industrial applications. It offers great performance for great variety of next generation solutions. Robustness is guaranteed by wide range of power supply voltage with transient/surge/noise/reverse polarity protection and reliable hardware watchdog timer.

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Linux	WiFi b/g/n Bluetooth
Ethernet	3 x USB
2 x RS232 2 x RS485	MikroBus
Web page Configuration	Remote Management
Watchdog Timer	Power supply 8-30VDC

DG100 provides seamless integration of new IoT enabled devices together with legacy devices to cloud services via HTTP/REST or MQTT. This provides a lot of useful data for the users from massive array of equipment such as motors, pumps, factory tools, HVAC units, vending machines, and much more.

Powerful IoT framework
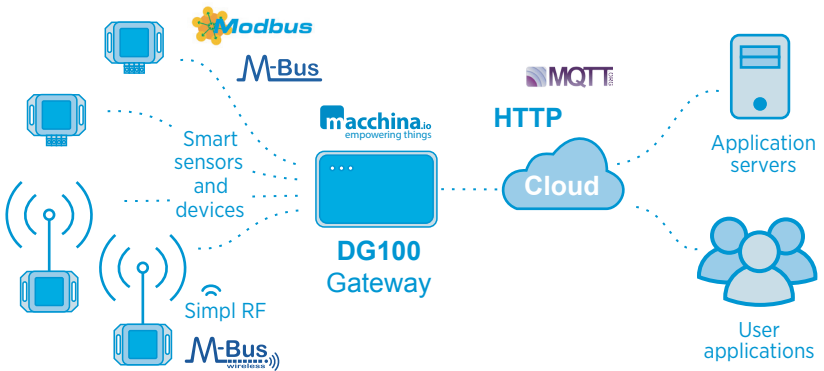
macchina.io
empowering things

Based on powerful macchina.io framework, DG100 gateway expand the frontiers with powerful components (bundles) and services architecture which enables modular, easily extensible applications that can be securely upgraded and extended with new features in the field.

Web based UI

Some of new exciting features are web-based user interface with application launcher, embedded database and new communication protocols.
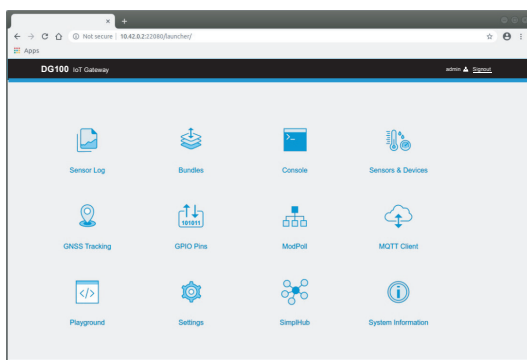
User programmable device

Framework supports JavaScript for user application development, currently the most popular programming language. Customer may use web based embedded JavaScript editor and engine to enter into the world of IoT device software development.

Remote management

DG100 support macchina.io Remote Manager which provides secure remote access to all DG100 Internet connected devices - for end users, service providers and support teams. Through a secure tunnel to the Remote Manager the edge device becomes just another host on the internet, addressable via its own URL and protected by the Remote Manager server against unauthorized or malicious access. No public IP address is required for the device.

Specification

CPU	ARM A7, i.MX6ULL, 900MHz
Memory	256MB SRAM, 4GB eMMC
OS	Linux, Buildroot 4.17.4
Ethernet	RJ45, 10/100TBase
WiFi	IEEE 802.11b/g/n
Bluetooth	BT LE 4.1
Serial ports	2 x RS232/RS-485
USB ports	Host, Device, Debug
MikroBus	One internal placement
RTC	Yes, with battery backup
Power supply	8 ~ 30V DC, typ. 1W
Housing	Plastic, 110x76x27mm
Mounting	Desktop, Wall mount

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DL28 Multiprotocol Edge Gateway

DL28 is a communication processor that handles data communication connections between measuring and control devices in a heating substation and their integration into remote monitoring and control systems (SCADA) by using diverse transfer routes. DL28 can be connected to SCADA programs in several ways: via local area networks (LAN), wireless computer networks (WLAN), CATV modems, GSM/GPRS/3G routers, as well as via other standard and wireless modems. An established communication link allows real-time remote monitoring and read-outs of process variables at the heating substation, as well as alarm conditions.

- Linux
- Ethernet
- 3 x RS232 / 3 x RS485
- Web page Configuration
- Watchdog Timer
- Optional 2G/3G/4G
- 3 x USB
- M-Bus Master/Slave
- DIN Rail
- Power supply 8-30VDC

Specification

CPU	Core ARM926EJ, 454MHz
Memory	128MB SRAM, 4GB eMMC
OS	Linux, LTIB 2.6.35.3
Modem	External 2G/3G/4G
Ethernet	RJ45, 10/100TBase
Memory card	microSD
Serial ports	4 x RS232/RS-485
M-Bus ports	Master and Slave
USB ports	Host, OTG, Debug
RTC	Yes, with battery backup
Power supply	18 ~ 36V DC, typ. 5W
Housing	Plastic, 70x85x73mm
Mounting	DIN Rail

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