DATA COMMUNICATION BETWEEN CONTROL UNIT AND CLOUD

MACHINE2WEB
IOT EDGE GATEWAY DATAEAGLE 7050

Using IoT Edge Gateway of Schildknecht AG enables transmitting data from the control unit into the cloud. Thanks to the eSIM card which is operable worldwide systems can be networked in all over the world. So IoT Edge Gateway DATAEAGLE 7050 is the optimal solution for analyzing data of machines in real-time, for remote maintenance, as well as for remote monitoring of systems for predicting component fatigue. This involves new business models for our customers in the form of services for their customers. Data analysis enables an increase in operating costs or improvement of products and services. Data preprocessing in the IoT Edge Gateway allows for data compression, providing for lower mobile radio costs at a standard rate independently of the respective place of installation. Mobile radio features the highest network coverage in the world and thanks to the role-based billing via the portal billing provides for an easy cost assignment according to accurate measuring points as well as accounting. The eSIM card automatically selects the best network among 400 providers (Unsteered Roaming). Devices and data are managed via a portal from which data is transferred into the system (ERP, Cloud) of the customer. Interfaces (OPC UA, RestAPI, MQTT, XML, SMS, Twitter, ftp, Email)) to the customer are freely selectable.

End-to end encryption and TÜV (German Technical Supervisory association) certification ensures maximum data security. IoT Edge Gateway DATAEAGLE 7050 speaks the language of all machines. All Ethernet-based fieldbus systems are available as an option. This enables measuring machine data in all over the world and setting new parameters. As an option, sensors can be connected via Bluetooth Low Energy or additional I/O modules can be connected.

ETHERNET FIELDBUS
ALL ETHERNET-BASED FIELDBUS SYSTEMS ARE AVAILABLE AS AN OPTION

EtherCAT.

PROFINET

EtherNet/IP

ETHERNET POWERLINK
Standardization Group

ERP-SYSTEM / PUBLIC CLOUD

SAP

Windows Azure

THINGS
INDUSTRY APPLICATIONS

DATAEAGLE 7050
IOT EDGE GATEWAY

DEVICE CLOUD
RESTFUL API

BLUETOOTH LOW ENERGY

ETHERNET FIELDBUS

CELLULAR COMMUNICATION

DATAEAGLE 7050 COMPACT
TECHNICAL DATA

○ GENERAL

Voltage supply	24 V DC
Connection voltage supply	Terminal clamps
Power consumption	200 mA
Fixing	DIN rail mounting
Protection class	IP20
Temperature range	-20...+60 °C
Conformity	CE
Weight	150 g
Width	22,5 mm
Height	99 mm
Depth	114,5 mm
Color	Black

○ RADIO TECHNOLOGY

2G	2G 850 MHz / 900MHz / 1800 MHz / 1900 MHz
3G EU	2G 900MHz / 1800 MHz; UMTS B1, B8
3G EU + WiFi	2G 900MHz / 1800 MHz; UMTS B1, B8; 802.11 b/g/n
3G US	2G 850 MHz / 1900 MHz; UMTS B2, B5
3G World	2G 850 MHz / 900MHz / 1800 MHz / 1900 MHz; UMTS B1, B2, B5, B6, B8, B19
4G	coming soon
5G	in preparation

○ INTERFACE

Interface	RJ 45
2-port Switch	Yes
Fieldbus	EtherCAT
	Ethernet/IP
	Modbus TCP
	ETHERNET POWERLINK
	PROFINET
	VARAN
	sercos

○ OPTION

	Bluetooth Low Energy