IoT Use Case: Machine Monitoring

Key features:

- Fully customizable IoT platform based on Thingsboard, capability for hundreds of Devices
- Values are stored in a Database, historical values can be shown for anytime in the past for troubleshooting
- Live Dashboard view, values refresh without page reload
- Low running cost (Server instance: 20-50 € / Month)
- Low payload size to keep data transfer low
- All calculations and Data logging functions are done on server side
- Industry aproved Gateways to Transfer values from the field into the cloud
- Very small program adjustments on PLC-side has to be done - in most cases none
- Comfortable Data overview via Collibellex mobile app available in Apple App store and Google Play store
- Server hosted in Germany
- Hourly or Daily reports via mail with Trace View

Network Infrastructure and cost overview

SRE-Solutions.com
by Rossmann-Engineering

Total estimated cost:

One time invest:
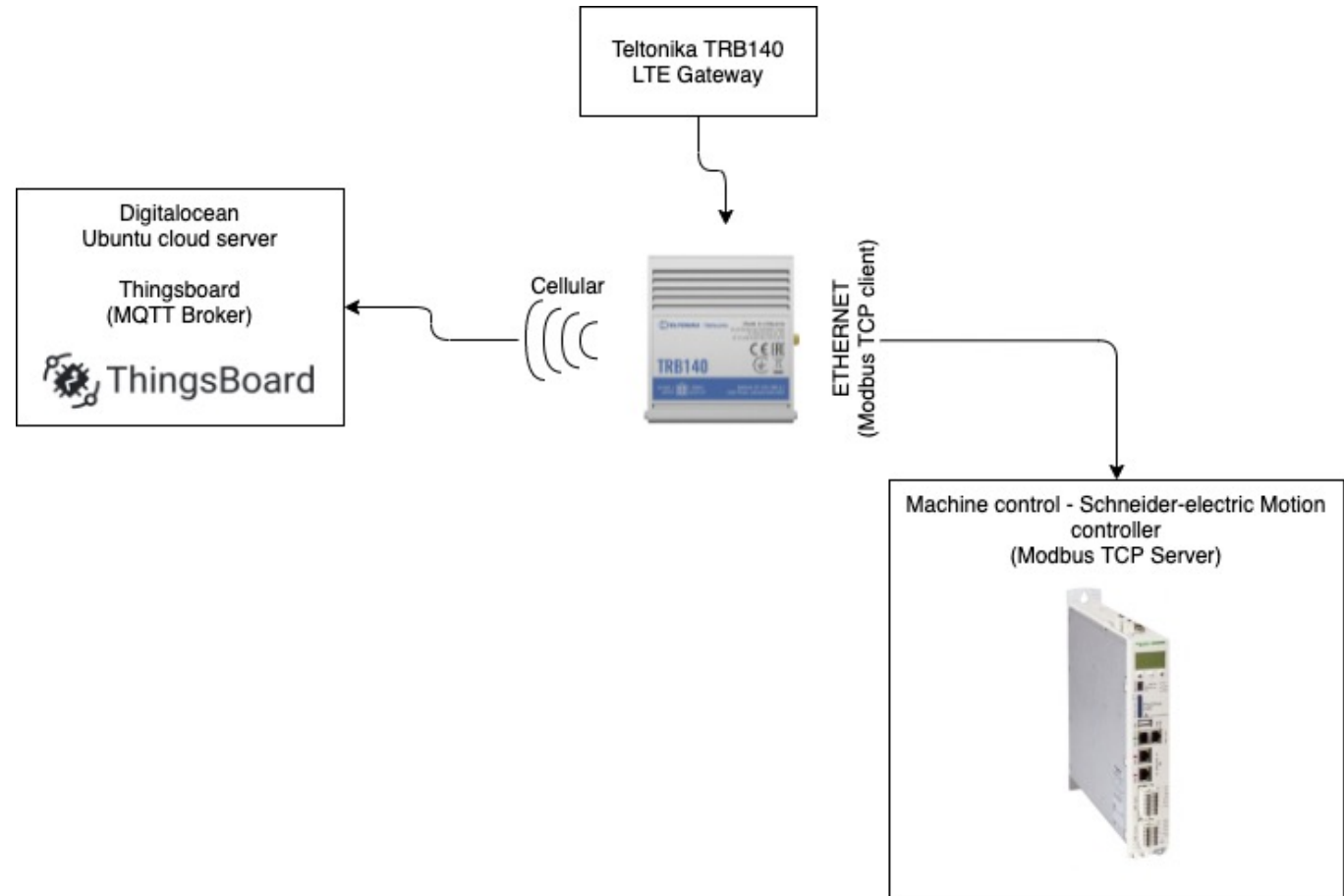Teltonika TRB140   120,00 €

Monthly Running cost:
SIM-Card 3GB / Month   10,00 €
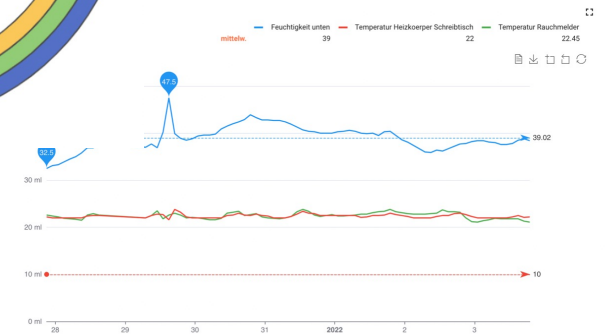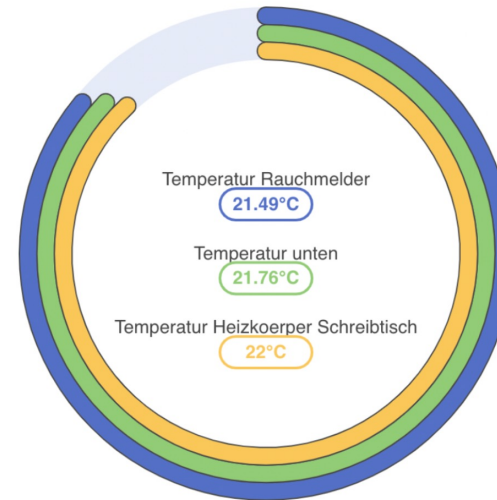Digitalocean Ubuntu Sever   24,00 €

Licensing cost   None

Open Source Widget devlopment on demand

open-source widget library
https://github.com/rossmann-engineering/Collibellex-Thingsboard-Widgets
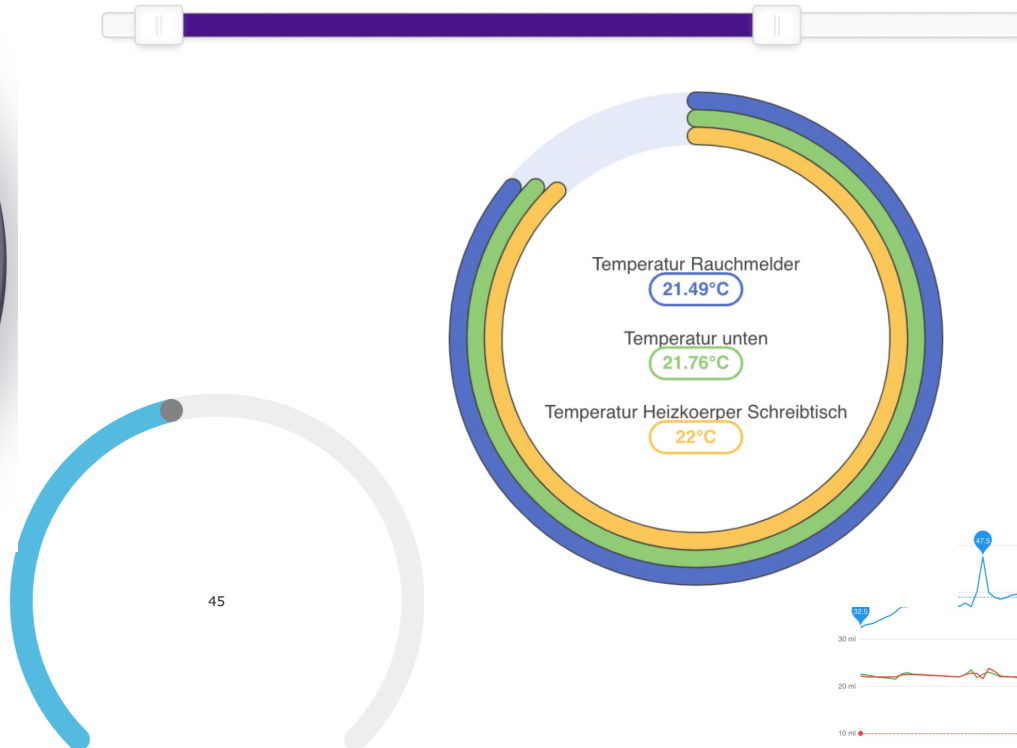
- Fully Customized Login Screen
- User Management for Customer Users and Tenant Administrators

✉ Benutzername (E-Mail) *

Ungültiges E-Mail Format.
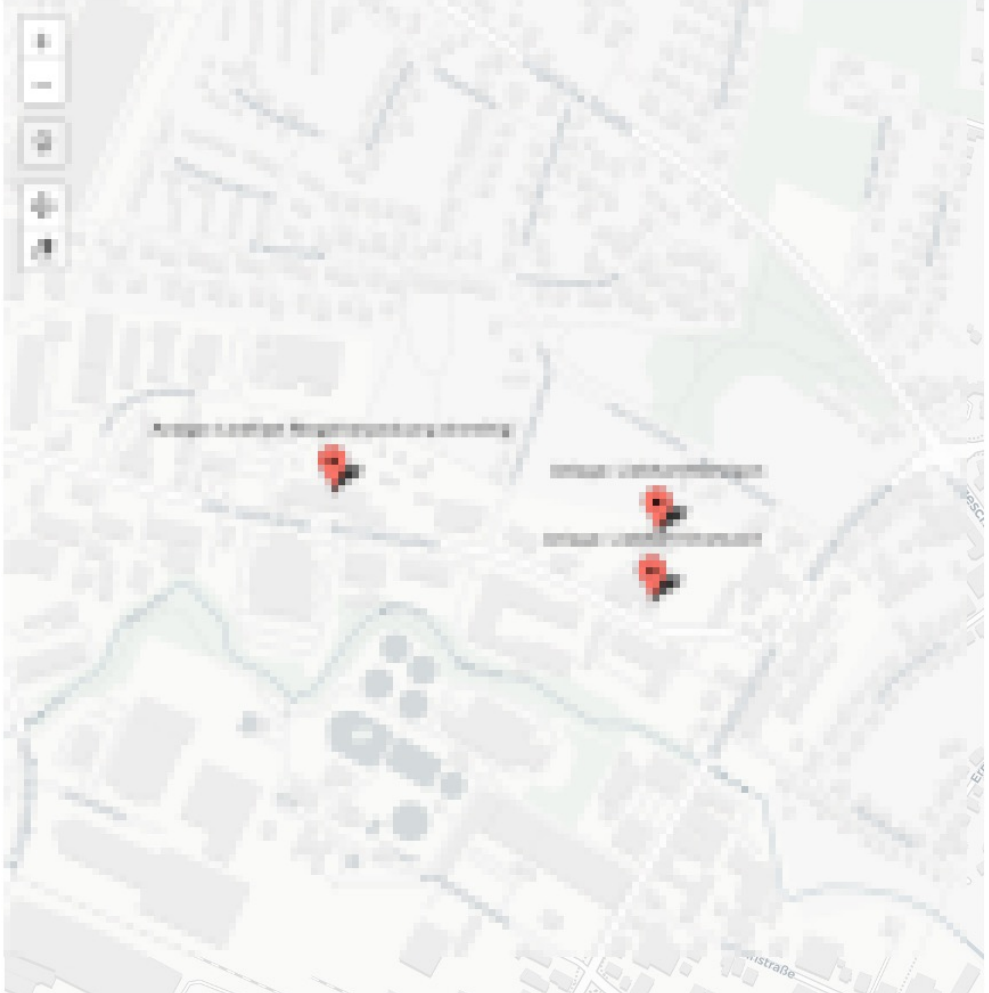
🔒 Passwort   👁️‍🗨️

Passwort vergessen?

Anmelden

Overview showing all available devices – Map view and list view with most important values

Dashboard overview for all relevant latest values

Liebherr Riegelverpackung einseitig
Last Update: Aug 1, 8:59

Aktuelle Takte Riegeleinlauf
317.2
0 — 350

Riegeleinlauf aktuelle Stunde
12786
0 — 18000

Riegeleinlauf letzte Stunde
12786
0 — 18000

Riegeleinlauf heute
18656
0 — 144000

Ausbringung aktuelle Stunde
440
0 — 600

Ausbringung letzte Stunde
440
0 — 600

Ausbringung heute
631
0 — 4800

Zeitverlauf

Graphical view for most relevant values

350 Stück

1

Aktueller Anlagenstatus

Anlage	Liebherr Riegelverpackung einseitig
Projektnummer	PR-21060##
Status	Bereit
Aktualisierungszeit	10 Sekunden
Latitude	51.95 °
Longitude	0.85 °
Taktzahl	317 Takte
Störung	---
letzte Störung	Störung Produktionssensor ausgelöst - 29
Ausbringung aktuelle Stunde	440 Packungen
Ausbringung letzte Stunde	440 Packungen
Ausbringung letzter Tag	0 Packungen
Ausbringung total	15657 Packungen
Zulauf Riegel aktuelle Stunde	12786 Riegel
Zulauf Riegel letzte Stunde	12786 Riegel
Zulauf Riegel total	467299 Riegel

Table view

Historical Values

Zeitverlauf

Taktzahl   Produktionsbereit

mittelw.   138.49   0.69

327.3

Soll Taktzahl ▓▓ pro Minute: 300

350 Stück

300 Stück

250 Stück

200 Stück

150 Stück

100 Stück

50 Stück

0 Stück

07:00   07:20   07:40   08:00   08:20   08:40   09:00

1

0.8

0.69

0.6

0.4

0.2

0
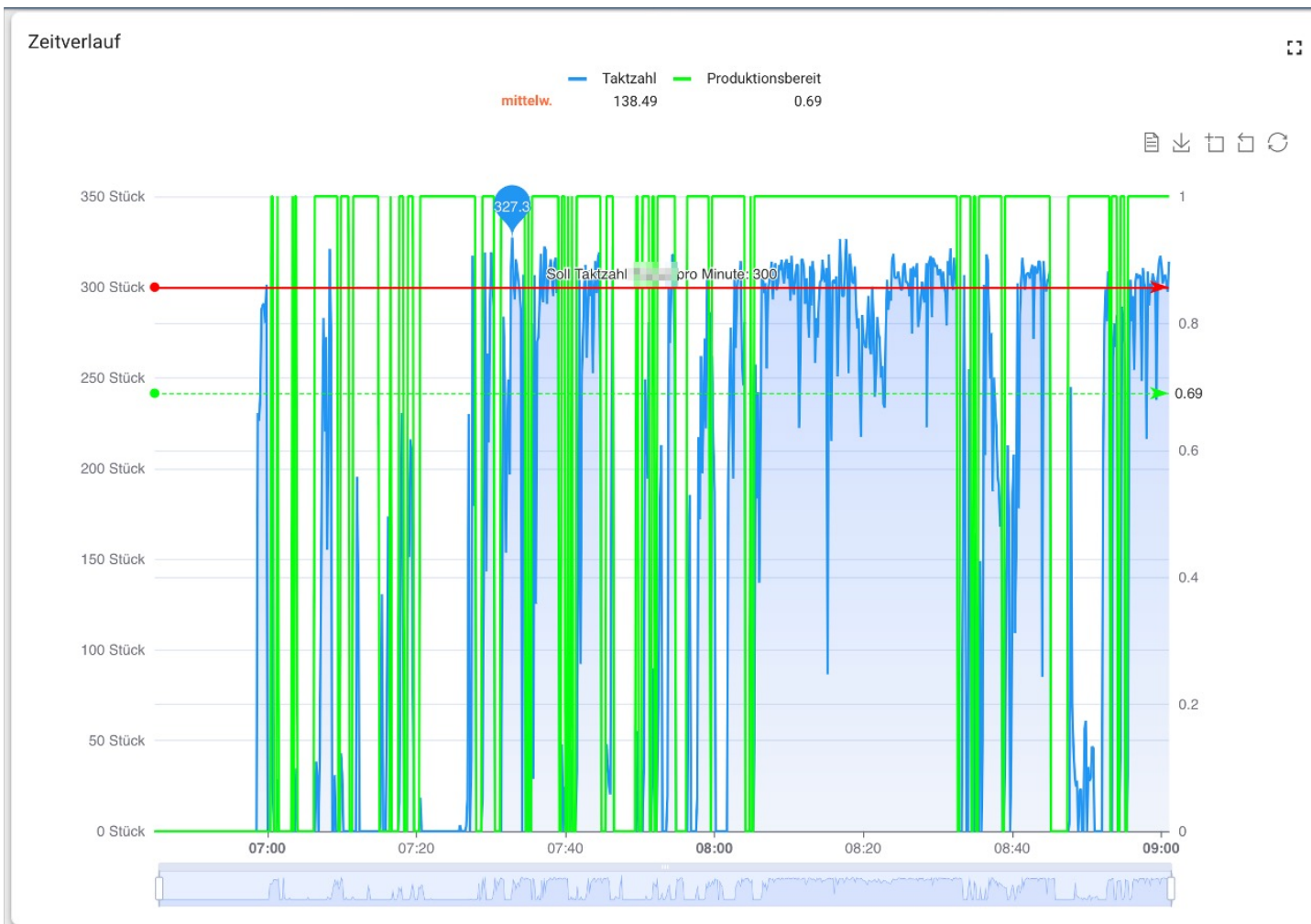
Message Log

Letzte Störungen

Timestamp ↓	Stoerung
2022-08-01 08:55:31	
2022-08-01 08:55:11	
2022-08-01 08:54:31	
2022-08-01 08:54:11	
2022-08-01 08:53:21	
2022-08-01 08:53:11	
2022-08-01 08:46:21	
2022-08-01 08:45:11	
2022-08-01 08:39:01	
2022-08-01 08:38:41	

Items per page: 10   1 – 10 of 79 |< < > >|

Last Hour Total Values

Stundenzähler Historie 🔍 ⛶
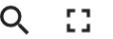
Timestamp ↓	Einlauf	Auslauf
2022-08-01 09:00:00	12786	440
2022-08-01 08:00:00	5526	191
2022-08-01 07:00:00	344	0
2022-07-29 12:00:00	740	48
2022-07-29 11:00:00	8408	288
2022-07-29 10:00:00	6225	221
2022-07-29 09:00:00	11401	383
2022-07-29 08:00:00	8820	273
2022-07-28 17:00:00	192	42

Items per page: 10 ▼ 1 – 10 of 35 |< < > >|

Last Days total values

Tageszähler Historie

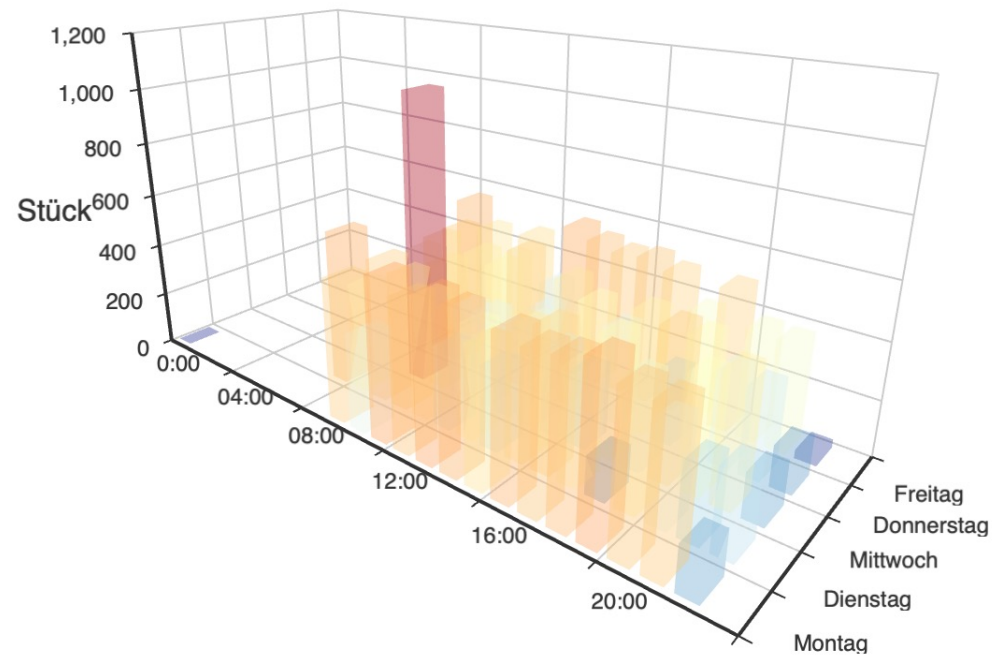| Timestamp ↓	Einlauf	Auslauf
2022-08-01 02:00:00	0	0
2022-07-31 02:00:00	0	0
2022-07-30 02:00:00	35594	1213
2022-07-29 02:00:00	93384	3187
2022-07-28 02:00:00	118466	3993

Items per page: 10   1 – 5 of 5 |< < > >|

3D Graphic showing hourly production in one week

Produktion Auslauf Stunde 3D Diagramm

— Produktzaehler Auslauf

mittelw.
417.12

Access via Collibellex-App – Fully customizable