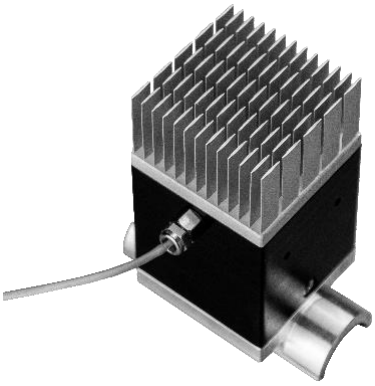
# SensEver® Alfa

## 1.5F version

## Maintenance free and wireless power supply for IIoT

- **Minimum Total Cost of Ownership**
- **Deployment in hard-to-reach places**
- **Enables higher data rate and quality**
- **No compromise due to battery lifetime**
- **Intended for use in harsh environment**



## Rethink Power Supply

**Process data is required to further optimise production or to enable predictive maintenance or new data-based business opportunities. Thus, the number of wireless sensors integrated to industrial processes is increasing. While batteries are offering great value for non-industrial applications, they post significant challenges when used in industrial context: unpredictable lifetime; an increasing total cost of ownership in form of service-related man-hours and process downtime; or reliability issues in EX- or harsh environment, to name a few.**

**SensEver Alfa** offers an alternative to batteries by transforming process heat into a regulated power supply.

**SensEver Alfa** is modularized and can easily be mounted to different surfaces, such as pipes of varying radius or machine shields.

**SensEver Alfa**'s power management adapts the output to the environment it works in.

At sufficient ΔT SensEver Alfa can deliver continuous power to sensors and low power communication protocols.

In case the energy harvested from the environment is insufficient to power the target application continuously, SensEver Alfa will deliver a periodical power from an internal buffer that is pre-charged. Once it is depleted, the buffer will be recharged

| Technical specifications* | | | |
|---|---|---|---|
| Output voltage: | 3.3V | Recharge time at ΔT 40°C: | 5 min |
| Max peak current: | 400mA | Cold Startup time at ΔT 40°C: | 11 min |
| Const. output at ΔT 40°C (±10%): | 14mW | Recharge time at ΔT 20°C: | 20 min |
| Avail. buffer energy at start-up: | 0.35mAh | Cold Startup time at ΔT 20°C: | 46 min |
| Avail. buffer energy fully charged: | 0.86mAh | Recharge time at ΔT 10°C: | 1.8 hrs |
| Operational max. surface T.: | 125°C | Cold Start-up time at ΔT 10°C: | 4.1 hrs |

*Measurement conditions: Hot side: ⌀25.4mm hot pipe with PID controller. Cold side: room temperature at 18°C with natural convection.

TEGnology Aps
Innovation House Alfa Laval
Maskinvej 5
2860 Søborg
Danmark

info@tegnology.dk
www.tegnology.dk

0524

TEGNOLOGY