**DATASHEET:**

**ENOGIA’S ENO-10MT ORC SYSTEM FACT SHEET**

ENOGIA’s ENO-10MT Medium Temperature 10kW Organic Rankine Cycle module uses ENOGIA proprietary Organic Rankine Cycle (ORC) Turbo-Generator that was specifically designed for high reliability and low maintenance.

Unlike volumetric expanders, lubrication is oil free and there is no metal to metal contact ensuring no wear and highest MTBF.

The innovative hermetic architecture of the turbogenerator provides high performance and low maintenance, resulting in low operation costs.

ENOGIA, created in 2009 by four engineers, is specialized in the development of ORC modules.

The company has received several public research grants related to green energy solutions and sustainable development.

ENOGIA benefits from the label “Young innovative company” of the French Ministry of Research since 2010.

The company welcomed new private investors in 2012.

Since the beginning of 2014, ENOGIA is backed by a strategic partnership with IFP Energies Nouvelles, a major research and innovation center, which allows ENOGIA to broaden the power range of its turbines and widen the field of use of heat-to-power solutions.

ENOGIA’s ENO-10MT Organic Rankine Cycle module is a complete, packaged unit, that includes all the components needed for a reliable and efficient heat to power conversion.

Installation is very simple: hot loop and cold loop are connected to the ORC with standard ISO PN16 flanges, electrical output is connected to the grid directly with the grid feed inverter, and communication with the fully automated control system is made via ethernet.

**ENOGIA ENO-10MT : your trusted partner for Medium Temperature Heat to Power conversion !**

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**ENO-10 MT COMPLETE ORC MODULE**

**Small and fully integrated ORC module!**

**MAIN DIMENSIONS**
- Length: 1.20 m
- Width: 0.80 m
- Height: 1.90 m

**CONNECTIONS**
- **Hot loop**: 2 ISO flanges DN50 PN16
- **Cold loop**: 2 ISO flanges DN50 PN16
- **Electrical output**: 400V 50Hz 3ph
- **Data**: ethernet RJ45

**Simplified grid connection thanks to the integrated inverter!**

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**ENO-10 MT V6.1 TURBO-GENERATOR**

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**12 kW GRID FEED INVERTER**

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**ENO-10 MT ORC MODULE**

<table>
<thead>
<tr>
<th>Working fluid</th>
<th>Novec 649</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat flux</td>
<td>Up to 150kW @160°C</td>
</tr>
<tr>
<td>Efficiency</td>
<td>From 6 to 10%</td>
</tr>
<tr>
<td>Weight</td>
<td>Less than 400kg</td>
</tr>
<tr>
<td>Inlet fluid conditions</td>
<td>water/glycol or thermal oil</td>
</tr>
<tr>
<td>Low temperature startup</td>
<td>110°C</td>
</tr>
<tr>
<td>Max temperature</td>
<td>180°C</td>
</tr>
<tr>
<td>Cooling</td>
<td>Water/glycol, 50 to 80°C</td>
</tr>
</tbody>
</table>

**KEY ADVANTAGES**

- High conversion efficiency
- Small heat source applications
- Possible to use heat of the cold loop for wide range of applications (heating domestic hot water, drying faster...)
- Plug and play system
- Optional integration in a container
- Supervision, data logging
- Usable with concentrating solar panels as heat source