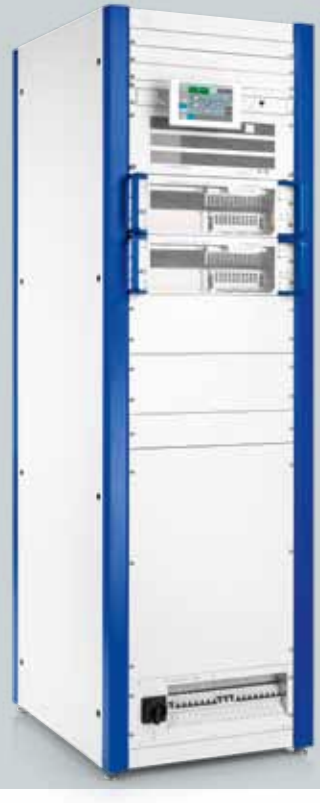

Example calculation – R&S®TMU9 with Doherty technology vs. market average air-cooled transmitter

	R&S®TMU9 with Doherty technology	Market average transmitter
P_{in}	3000 W	5700 W
P_{out}	1140 W	1140 W
Power efficiency	**38%**	**20%**
Required energy per year (24/7)	26280 kWh	49932 kWh
Expected energy costs at EUR 0.10 per year (24/7)	EUR 2628	EUR 4993
Saved energy costs per year	EUR 2365	–
Energy costs in 10 years	EUR 26280	EUR 49932
Saved energy costs in 10 years	EUR 23652	–

All values including cooling.

Advantages of up to 38% power efficiency:

- **More than 40% reduction in energy costs**
- Significant reduction of CO_2 emissions
- Improvement in power efficiency by almost 100%

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Example calculation – R&S®THU9 with Doherty technology vs. market average liquid-cooled transmitter		
	R&S®THU9 with Doherty technology	**Market average transmitter**
P_{in}	12200 W	23250 W
P_{out}	4650 W	4650 W
Power efficiency	**38%**	**20%**
Required energy per year (24/7)	107200 kWh	203700 kWh
Expected energy costs at EUR 0.10 per year (24/7)	EUR 10720	EUR 20370
Saved energy costs per year	EUR 9650	–
Energy costs in 10 years	EUR 107200	EUR 203700
Saved energy costs in 10 years	EUR 96500	–

All values including cooling.

Smart Doherty solution with several advantages:

- Increase in efficiency by up to 100% compared with market average transmitters
- Built-in power supply redundancy for enhanced availability
- Longer lifetime through lower device temperature