



# UPGRADES MADE BY NORDEX

## ROTOR BLADE ICE DETECTION SYSTEM | EXTENDED OPERATING RANGE TO -20° C

**Yield-efficient. Secure. Foresighted – our winter products for your wind turbine**

➤ Minimise downtimes and secure higher yields during the cold months. This is precisely what can be achieved with our winter products, the Rotor Blade Ice Detection System and the Extended Operating Range to -20°C.

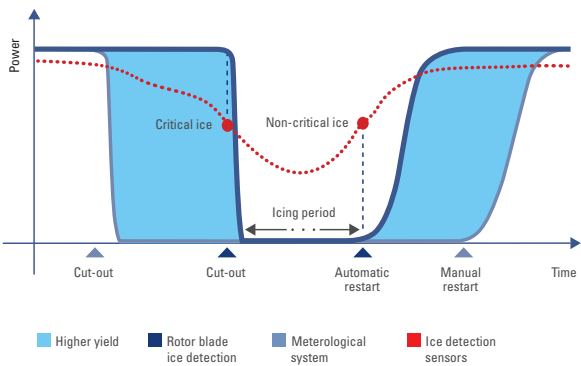


# ROTOR BLADE ICE DETECTION SYSTEM

➤ Benefit from the continuous monitoring of the rotor blades for ice formation and simultaneously increase personal safety in your wind farm.

The sensors in every rotor blade measure dynamic structural changes to the blades. In the event of critical ice formation, an alarm message is sent and the wind turbine immediately shuts down. The turbine automatically restarts once the critical ice formation is no longer present.

This upgrade is available for our N100 and N117 Gamma generation turbines.



## Upgrade assessment

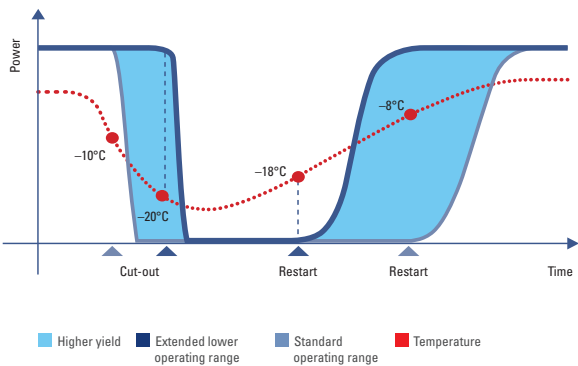
Increased power	⚙️⚙️⚙️
Increased availability	⚙️⚙️⚙️
Improved security	⚙️⚙️⚙️
Increased service life of components	⚙️⚙️⚙️

# EXTENDED OPERATING RANGE TO -20°C

➤ Increase your yield, even during cold ambient temperatures, by extending your turbine's temperature range to -20°C.

Temperature-related downtimes between -10°C and -20°C are reduced or even entirely eliminated by the optimised operation control. The turbine now restarts from as low as -18°C and not at -8°C as was previously the case.

The upgrade is available for our N100 and N117 Gamma generation turbines in the normal climate version (NCV).



## Upgrade assessment

Increased power	⚙️⚙️⚙️
Increased availability	⚙️⚙️⚙️
Improved security	⚙️⚙️⚙️
Increased service life of components	⚙️⚙️⚙️

➤ We are happy to provide you with an offer for the products Rotor Blade Ice Detection System and Extended Operating Range to -20°C. Please contact us.