

# 5.5MW 7.25MW 16.6MW Floating Wind Turbines



CMB Energy leads in developing and producing MW-scale wind turbines, leveraging a strong supply network for versatile onshore, offshore, and floating solutions tailored to various wind conditions. Leader of Hybrid Drive technology Customized designs for higher efficiency, higher reliability and lower LCOEs Tests and verifications at all levels – materials, components, subsystems, turbines, wind farms Full lifecycle management powered by IoT, big data & AI.

## **Product Proformance:**

### **Higher efficiency**

Higher efficiency permanent magnets generator to guarantee electric energy conversion and continuous provide high-quality power output



### Higher reliability

Fewer components eliminate failures and maximize turbine availability to more than 99%

#### Cost-saving

Optimize maintenance to lower overall costs

#### **Grid-friendly**

Power flexibility with zero power-grid impact and outstanding high and low voltage ride-through capabilities

## Our specialty:

#### Site Customization

In line with the needs of site conditions, the design capacity can be increased by:  $0.5 \% \sim 3 \%$ 

#### Capacity enhancement

The power generation performance of the wind turbines in service can increased by: 2 % ~ 5 %

#### Safety control

Quality loss of large components can be reduced by 70 %

#### **Flexible grid connection**

The global grid characteristics are extensively adapted, and the grid connection pass rate can be as high as the global grid characteristics are extensively adapted, and the grid connection pass rate can be as high as 100 %

#### **Environmental-friendly**

Fully green operation in field-level noise control losses is reduced by 2 %

#### **User-friendly**

The O&M efficiency of software troubleshooting and technical transformation is increased by  $3 \sim 5$  time

## 5.5MW 7.25MW 16.6MW Floating Wind Turbines

CMB is pioneering the global energy shift with cutting-edge floating offshore wind solutions, including the CEFE 5.5MW, CEFE 7.25MW, and disruptive 16.6MW double-rotor floating wind system, capable of harnessing wind power in deep waters up to 100km and 100m deep. Together with strategic partners, we are propelling the advancement and commercial viability of floating wind, driving its widespread adoption.



## CEFE 5.5-155 5.5MW Floating Wind Turbines

World's first typhoon-resistant floating wind turbine Integrated simulation for wind, wave and current synergy Smart control optimizes load and improves power generation Robust typhoon resistance, withstands up to 70 m/s winds

Rated power (MW) 5.5 Rotor diameter (m) 155 Rated wind speed (m/s) 10 Turbulence intensity 0.14 Survival wind speed (m/s) 70.1

### CEFE 7.25-158 7.25MW Floating Wind Turbines

China's first "double 100" deepwater floating wind turbine Integrated simulation for wind, wave and current synergy Smart control optimizes load and improves power generation Smart backup power lubrication system ensures reliability Ultimate typhoon and wave resistance, withstands up to 84 m/s winds Leveraging CMB Energy's expertise in deepwater floating wind construction and O&M

Rated power (MW)7.25Rotor diameter (m)158Rated wind speed (m/s)10Turbulence intensity0.14Survival wind speed (m/s)84

#### CEFE16.6-182 16.6MW Floating Wind Turbines

World's first 16MW+ double-rotor floating wind system Auto yawing to downwind enhances reliability and reduces load Innovative tower, lightweight pontoons enhances reliability and generation Modular high performance concrete floating foundation cuts system cost Single point mooring, compound anchoring lessen system load and sea impact Robust typhoon resistance, withstands up to 79.8 m/s winds

Rated power (MW)	16.6
Rotor diameter (m)	182
Rated wind speed (m/s)	10
Turbulence intensity	0.135
Survival wind speed (m/s	) 72.24