**Multi-purpose research vessel**

<table>
<thead>
<tr>
<th>Flag</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call sign</td>
<td>DBKR</td>
</tr>
<tr>
<td>IMO-Nr</td>
<td>8521438</td>
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<tr>
<td>MMSI</td>
<td>218 601 000</td>
</tr>
<tr>
<td>Classification</td>
<td>GL 100 A5 M E (Dry Cargo Ship)</td>
</tr>
<tr>
<td>Owner</td>
<td>Land Mecklenburg-Vorpommern</td>
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<tr>
<td>History</td>
<td>1987 built as research vessel for German Navy by Kröger-Werft Rendsburg; 2010 purchased by Land Mecklenburg-Vorpommern, and converted in 2011 to a multi purpose research vessel at Peene Werft in Wolgast</td>
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<tr>
<td>Personnel</td>
<td>Crew: 11; Scientists: 12</td>
</tr>
</tbody>
</table>

**Basic dimensions:**

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<tr>
<th>BRZ: 850</th>
<th>Length o.a.: 56,50 m</th>
<th>Length p.p.: 50,00 m</th>
<th>Beam: 10,80 m</th>
<th>Draught: 3,65 m</th>
<th>Free board: 1,70 m</th>
<th>Service Speed: 11 kn</th>
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</table>

**Main engine:**

3 diesel generators (520 kW each)  
Typ MTU 6V 396 TB 53

**Propulsion:**

diesel-electric;  
Permasyn-motor;  
single propeller

**Manoeuvering propulsion devices:**

transverse thrusters (147 kW each),  
at bow and stern

**Voltage:**

660 V, 60 Hz  
rotary main power  
440 V, 60 Hz  
rotary power supply  
220 V 50 Hz  
in labs as UPS  
220 V/380 V 50 Hz for containers  
24 V DC

**Bunker cap.:**

82 m³ marine gas oil  
26 t drinking water

**Consumption:**

3,5 t gas oil/day  
4000 nm

**Navigation Equipment:**

2 radars, gyrocompass,  
ECDIS and auto-pilot,  
echo sounders, DOLOG, 3 GPS-Systems

**Scientific Equipment:**

DWD-weather-station,  
Data system D-SHIP® by WERUM  
Surface water thermosalinograph,  
Clean seawater system,  
ADCP VM Ocean Surveyor OSII 150 kHz,  
SES2000 medium, sediment echo sounder by INNOMAR, 100kHz  
R2Sonic 2024, Broadband multibeam echosounder 200-400 kHz  
Motion Reference Unit (MRU) IXSEA Phins  
Hydrographic well  
CTD-system with vessel swell moving compensation  
Utility and fast rescue boat

**Communication:**

GSM- Tel.& Fax, IRIDIUM,  
V-SAT- (digital data-transmission),  
Wireless station with GMDSS for area A3

**Lifting gear:**

Hydraulic crane SWL 4,5 t/ up to 8 m with own winch 400 m  
Hydraulic crane 1,5 t/ up to 6 m with own winch 300 m  
A-frame 4 t  
Provisions Crane on forecastle 0,9 t

**Special winches:**

CTD-winches up to 1500 m with cable  
Ø12,7 mm,  
Double drum hydraulic winch (mobile) 1 t with 600 m coaxial cross cable Ø8,1mm/ 1000 m steel rope 6 mm

**Container:**

2 places for 20 ft. à 15 t incl. infrastructure  
also possible 4x 10 ft. container

**Laboratories:**

all labs with LAN, PC, miscellaneous media,  
universal lab 16 m²  
cold storage lab (adjustable a -23 °C) 11 m²  
wet lab 17 m²  
CTD room (with gate to outboard) 11 m²  
measuring room 8 m²  
hydro acoustics control 14 m²  
surface registration room 9 m²

**Accommodation:**

11 x one bed cabins, air conditioned  
7 x two bed cabins, air conditioned

**date of issue:** 04.05.2011
**r/v Elisabeth Mann Borgese** General Arrangement Plan

**Scientific Co-ordination:**
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**Technical Management:**
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