

LGR greenhouse gas analyzer

Los Gatos Research (LGR)



LGR greenhouse gas analyzer deployed on 'Snow Dragon', the polar scientific research vessel

Measurement made easy

LGR greenhouse gas analyzer

Introduction

On November 5th 2013, LGR's Greenhouse Gas Analyzer (GGA-24EP) was officially deployed by LICA United onboard the 'Snow Dragon', the Chinese icebreaking research vessel. With LGR's GGA, on November 7th 2013, the 'Snow Dragon' opened the thirtieth Antarctic expedition. This is the second time that the LGR GGA boarded the polar 'Snow Dragon' scientific research vessel following the Arctic expedition of last year.

With the help of the LGR Greenhouse Gas Analyzer and related auxiliary equipment, researchers will study the route of several greenhouse gases (including methane, carbon dioxide and water vapor) within the atmosphere as well as quantify air-sea fluxes, which will lay a solid foundation for studying the relation of polar change and climate in China.

This Antarctic expedition is a multidisciplinary oceanographic research effort that will experience harsh environmental conditions, including strong winds, large waves, and cold temperatures. Scientific researchers selected the LGR Greenhouse Gas Analyzer in the 'Snow Dragon' due to its ruggedness and excellent performance characteristics, including high precision, accuracy, low drift and ease of use.

For more information

Further details of ABB Measurement & Analytics products are available for free download from: www.abb.com/measurement

or by scanning this code:



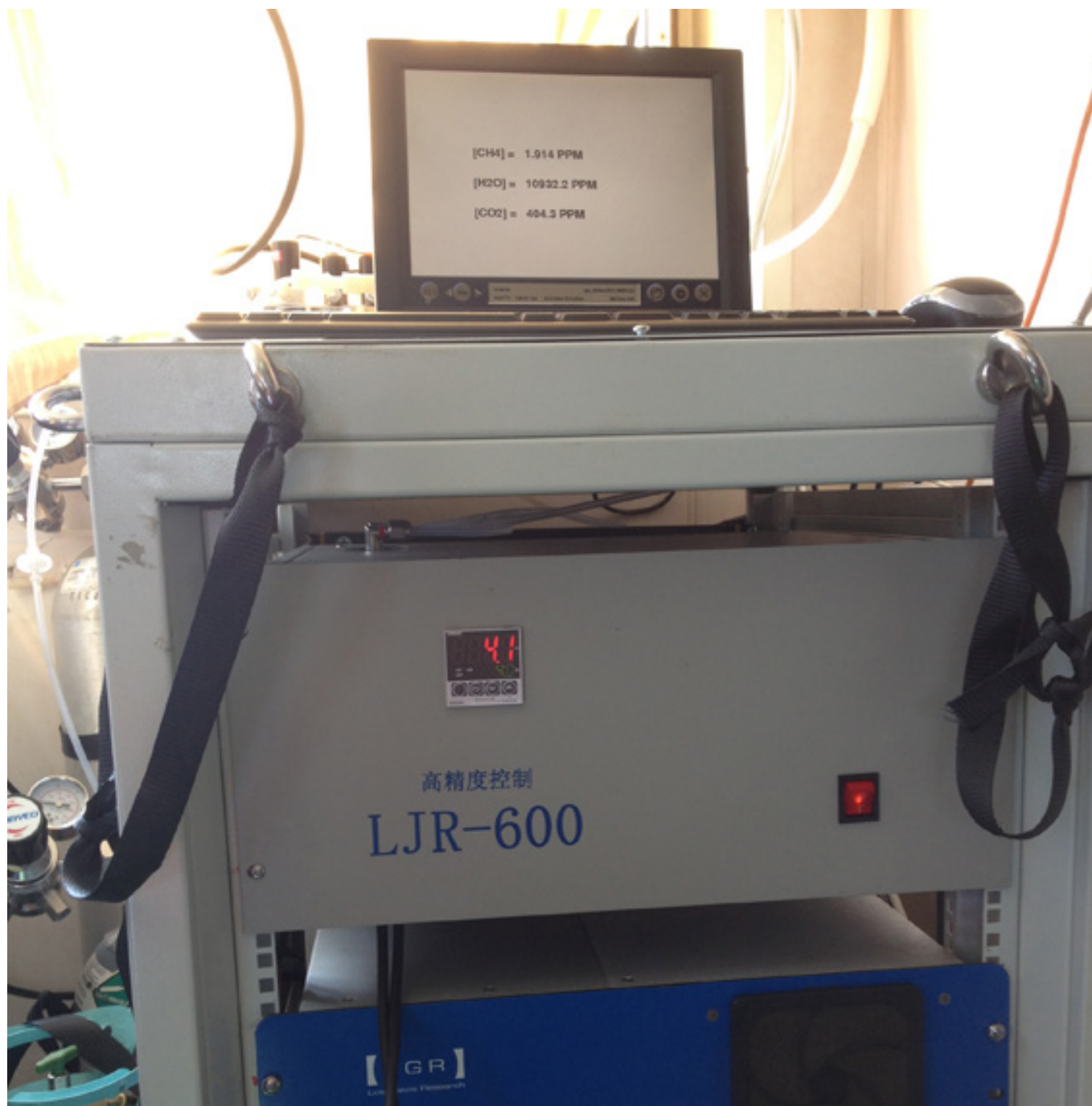
Facts

M/V Xuě Lóng (雪龙, 'Snow Dragon') is a Chinese icebreaking research vessel. Built in 1993 at Kherson Shipyard in Ukraine, she was converted from an Arctic cargo ship to a polar research and re-supply vessel in 1994. Extensively upgraded in 2007, she is expected to go through another upgrade in 2013.

As of 2012, Xuě Lóng is the only Chinese icebreaking research ship in service. A second Chinese polar icebreaker is expected to enter service in 2014.

Xuě Lóng is 167 metres (548 ft) long and has a beam of 22.6 metres (74 ft). When loaded to a draft of 9 metres (30 ft), she has a displacement of 21,025 tons. The ship is powered by a single 8-cylinder BMZ 8DKRN60/195 low-speed two-stroke diesel engine, a licence-built version of B&W 8L60MC, producing 13,200 kW (17,700 hp). The main engine is coupled to a ducted controllable pitch propeller. In open water, Xu Lóng can achieve a maximum speed of 18 knots (33 km/h; 21 mph) while in 1.1-metre (4 ft) ice she can proceed at 1.5 knots (2.8 km/h; 1.7 mph). Her ice class, assigned by the China Classification Society (CCS), is B1.

Xuě Lóng has a crew of 34 and can accommodate 128 researchers or passengers. She has 100 square metres (1,100 sq ft) of laboratory space. In addition to a helicopter, the ship also carries an Arctic class ARV autonomous underwater vehicle on a regular basis.



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