SiCOMS® RMU
### ADVANTAGES

» **Remote data display of up to 8 connected SiCOMS® systems**

» **Additional display for SiCOMS® system Evaluator**

» **Measuring data display at a safe place if SiCOMS® system Evaluator is mounted in a dangerous area**

» **A second alarm equipment can be connected to the alarm relays of the Remote Monitoring Unit (RMU)**

TECHNICAL DATA

Power Supply	24V DC +30% / -25%
Power consumption	max. 0.5 A
Manageable systems	up to 8 SiCOMS® systems
Outputs	3 isolated relay contacts: • Shutdown | Main alarm • Pre-alarm • System Ready
Data interface	• Modbus (RS422 or RS485) • CAN Bus
Ambient temperature	0 - 70°C

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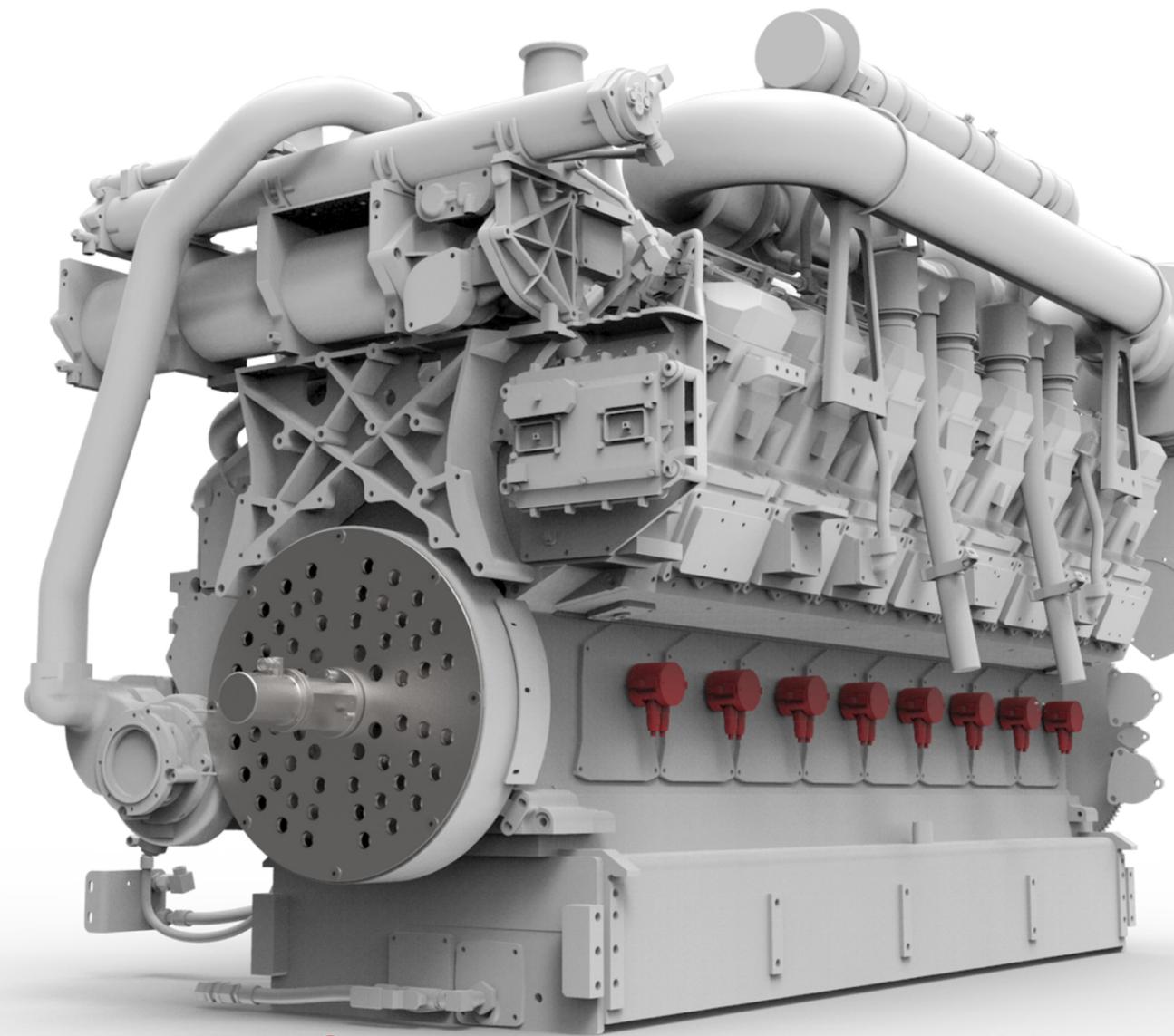
SiCOMS®
Remote Monitoring Unit RMU

motcom GmbH
Kurt-Schumacher-Str.28-30
D-66130 Saarbrücken

Phone +49 (0) 681 – 8837904-0
Fax +49 (0) 681 – 8837904-19
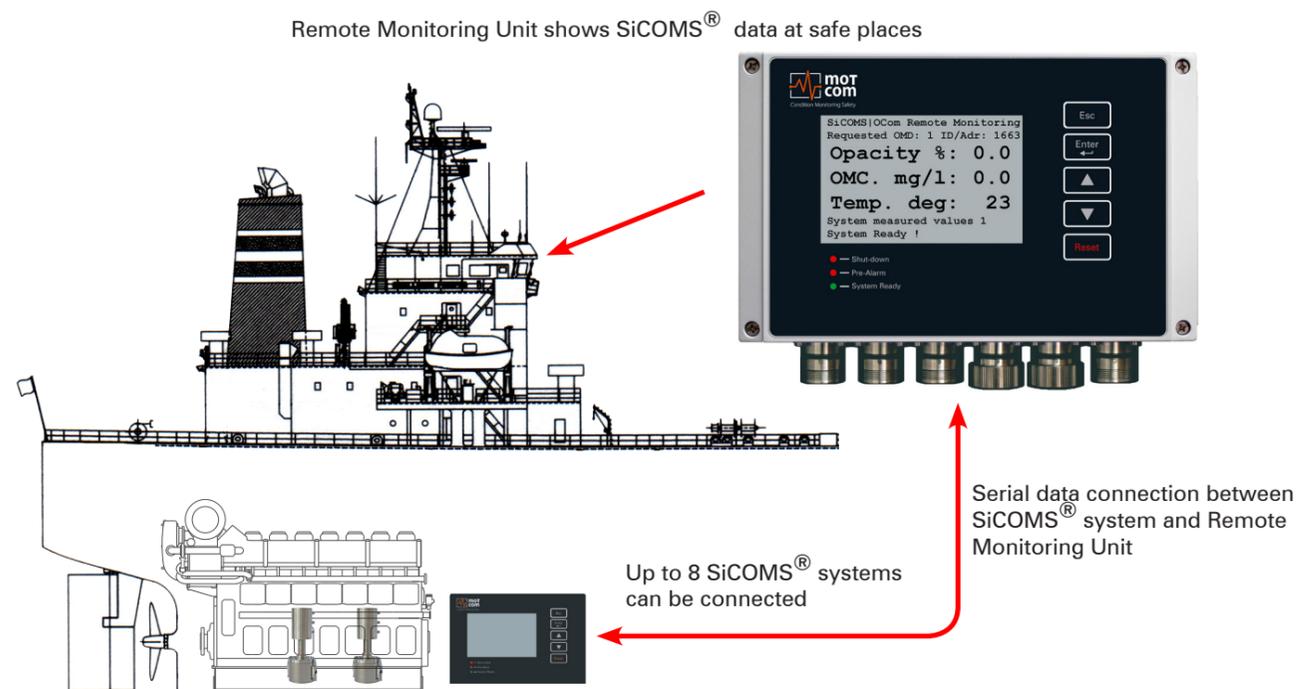**eMail** info@motcomgmbh.com
Internet www.motcomgmbh.com

motcom® RMU Flyer 240417-en

motcom GmbH | Kurt-Schumacher-Str.28-30 | D-66130 Saarbrücken
Phone +49 (0) 681 – 8837904-0 | **Fax** +49 (0) 681 – 8837904-19
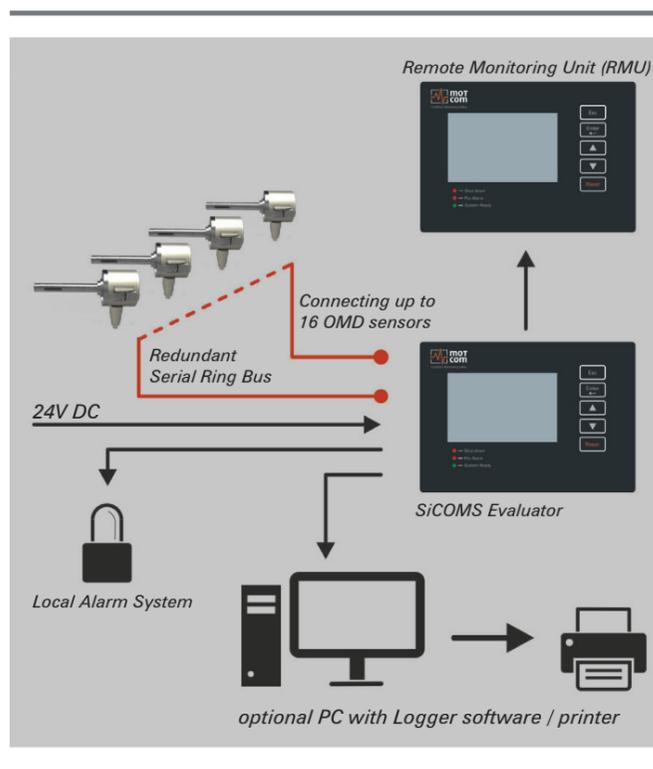**eMail** info@motcomgmbh.com | **Internet** www.motcomgmbh.com

INTRODUCTION

Oil mist inside an engine accrues when lubricants or fuel come in contact with hot surfaces. A damaged bearing can be a possible source of heat due to friction, leading to oil mist formation. This oil mist becomes highly ignitable at a concentration of 50mg/l or higher (LEL lower explosive limit). This can result in an explosion causing large scale engine damages and in a worst case the loss of human lives.

FUNCTIONAL DESCRIPTION

Remote Monitoring Unit shows SiCOMS® data at safe places

Serial data connection between SiCOMS® system and Remote Monitoring Unit

Up to 8 SiCOMS® systems can be connected

According to the IACS M10.11, "oil mist detection and alarm information is to be capable of being read from a safe location away from the engine". In cases where the SiCOMS® Evaluator is installed in the dangerous area direct at the engine wall the Remote Monitoring Unit (RMU) is recommended. The RMU is an additional monitoring unit for up to 8 SiCOMS® systems connected over Modbus or CAN bus.

The Remote Monitoring Unit is installed in a safe place, no crew member is at risk during the measured value check in case of a pending alarm. It displays simultaneously all values and status informations of the selected SiCOMS® system. A second alarm equipment can be connected to the alarm relays of the Remote Monitoring Unit (RMU).

Remote Monitoring Unit (RMU)

Connecting up to 16 OMD sensors

Redundant Serial Ring Bus

24V DC

SiCOMS Evaluator

Local Alarm System

optional PC with Logger software / printer

REMOTE MONITORING HARDWARE

The RMU is designed to withstand the environment in the engine room. Its vibration resistance allows an installation close to the engine without any special support. The housing of the RMU is water, dust and shock resistant, EMC-proof and complies with protection class IP 66.

The RMU consists of a alloy case, a liquid crystal display (LCD), three LEDs indicating the system status and five membrane buttons for user interaction.

A powerful micro controler inside the RMU analyses the received data continously, displays the data on the LCD and triggers the alarm relays in case of dangerous oil mist concentration or evolution of temperature. The bargraph display makes compartment localisation easy. The RMU continously checks all RMU functions, connected SiCOMS® systems and shows detailed messages in case of any error.
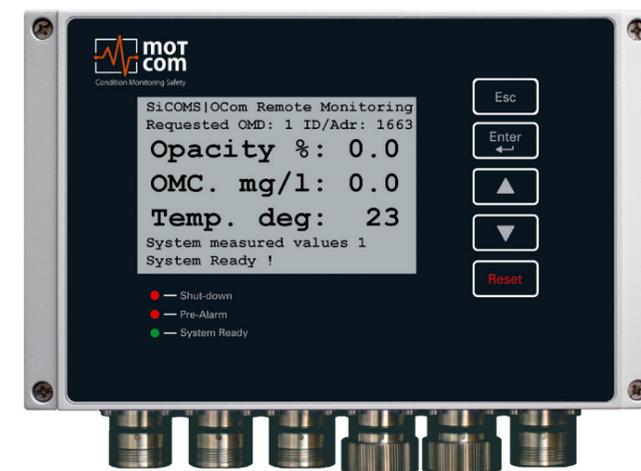
REMOTE MONITORING SOFTWARE

Remote Monitoring Unit is able to view opacity, oil mist in mg/l, the temperature either averaged over all sensors of one system or for each sensor individually. It also features bar graphs for the above mentioned data.

Remote Monitoring Unit can be connected to a maximum of 8 different SiCOMS® systems. You can select the system to display easily via the user interface.

The measured data are online transferred from the SiCOMS® Evaluator to the Remote Monitoring Unit. Remote Reset of the connected SiCOMS® Evaluators is possible if wished.

The built-in relays of the Remote Monitoring Unit can be used to trigger an alarm system in addition to the alarm system already triggered by the SiCOMS® Evaluator of the appropriate SiCOMS® system or to indicate malfunction of this system extra.

Remote Monitoring Unit fulfills the IACS rule M10.11 which requires the measured data to be readable from a safe remote place like the engine control room.