Certificate of Compliance

Certificate: 70024492 **Master Contract:** 238631

Project: 70029781 **Date Issued:** August 14, 2015

Issued to: **OleumTech Corp.**
19762 Pauling
Foothill Ranch, CA 92610
USA

Attention: Mr. Patrick Clark

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Issued by: Andrew Sargent

PRODUCTS

CLASS 2258 02 – PROCESS CONTROL EQUIPMENT – For Hazardous Locations
CLASS 2258 82 – PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified to US Standards

Class I, Division 2, Groups A, B, C, D T4
Ex nA IIC T4 Gc
Class I Zone 2 AEx nA IIC T4 Gc

WIO Analog and Digital I/O modules, Expansion Power modules, and Gateway modules. -40 °C ≤ T_{amb} ≤ 80 °C. Models and ratings as described below.

Isolated 4-20 mA Analog I/O Module, 2 AI/2 AO - Model BM-A420-122. Supply from system backplane: 5V dc, 150 mA. Analog output 20.5 mA (use loop power, Vdiff on Terminal = 5 Vdc).

0-10 V Analog I/O Module, 2 AI/2 AO - Model BM-A010-122. Supply from system backplane: 5 V dc, 70 mA. Analog output 0-10V, 1 mA max (minimum input impedance is 10K ohm).

Isolated Digital I/O Module, 4 DI/4 DO - Model BM-D100-144. Supply from system backplane: 5 V dc, 56 mA. Digital output 30V, 1A (open drain output, sink current)

Expansion Power Module - Model BM-1000-PM1. Supply 9 to 30 V dc CLASS 2/SELV, 6.8 W max. Output to system backplane: 5 V dc, 1 A Max.

Gateway Module, 900 MHz - Model BM-0900-GM1. Supply 9 to 30 V dc CLASS 2/SELV, 6W max. Output to system DataRail: 5 V dc, 0.85 A Max.

Gateway Module, 2.4 GHz. - Model BM-2400-GM1. Supply 9 to 30 V dc CLASS 2/SELV, 6W max. Output to system DataRail: 5 V dc, 0.85 A Max.

Gateway Module, 915 MHz. - Model BM-0915-GM1. Supply 9 to 30 V dc CLASS 2/SELV, 6W max. Output to system DataRail: 5 V dc, 0.85 A Max.

Gateway Module, 2.4 GHz (Int'l) - Model BM-2410-GM1. Supply 9 to 30 V dc CLASS 2/SELV, 6W max. Output to system DataRail: 5 V dc, 0.85 A Max.

Gateway Module, 868 MHz - Model BM-0868-GM1. Supply 9 to 30 V dc CLASS 2/SELV, 6W max. Output to system DataRail: 5 V dc, 0.85 A Max.

Class I, Division 2, Groups A, B, C, D T3
Ex nA IIC T3 Gc
Class I Zone 2 AEx nA IIC T3 Gc

WIO Wireless radio modules. -40 °C ≤ T_{amb} ≤ 80 °C. Models and ratings as described below.

Radio Module, 900 MHz - Model BM-0900-RM1. Supply 9 to 30 V dc CLASS 2/SELV, 6.8W max. Output to system DataRail: 5 V dc, 1 A Max.

Radio Module, 2.4 GHz. - Model BM-2400-RM1. Supply 9 to 30 V dc CLASS 2/SELV, 6.8W max. Output to system DataRail: 5 V dc, 1 A Max.

Radio Module, 915 MHz. - Model BM-0915-RM1. Supply 9 to 30 V dc CLASS 2/SELV, 6.8W max. Output to system DataRail: 5 V dc, 1 A Max.

Radio Module, 2.4 GHz (Int'l) - Model BM-2410-RM. Supply 9 to 30 V dc CLASS 2/SELV, 6.8W max. Output to system DataRail: 5 V dc, 1A Max.

Radio Module, 868 MHz - Model BM-0868-RM1. Supply 9 to 30 V dc CLASS 2/SELV, 6.8W max. Output to system DataRail: 5 V dc, 1 A Max.

Notes:

1. All modules are to be used with accessory Data Rail, part number 61-7000-00x, rated 150V max, 8A max., -40 °C ≤ T_{amb} ≤ 80 °C.

2. This is OPEN type equipment that must be installed within a suitable end-use enclosure that requires a tool to access, and is appropriately certified (e.g. Ex e, Ex nA, Ex d, Ex p, or equivalent protection), providing a minimum ingress protection level of IP54. The suitability of the enclosure is subject to investigation by the local Authority Having Jurisdiction at the time of installation.
3. The installer shall ensure that the service temperature of the enclosure is not exceeded and the maximum rated ambient temperature of the modules are not exceeded.
4. Wiring to or from this equipment, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I, Division 2 and/or Class I, Zone 2 Hazardous Locations, as appropriate for the installation.
5. External transient overvoltage protection must be provided in the power supplied to the equipment at a level not exceeding 140 % of the rated voltage at the power supply terminals of the apparatus.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 0-10	General Requirements - Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 61010-1-12	Electrical Equipment for Measurement, Control and Laboratory Use — Part 1: General requirements
CAN/CSA-IEC 61010-2-201:14	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 2-201: Particular requirements for control equipment
CSA C22.2 No. 213-M1987 *(Reaffirmed 2013)*	Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 60079-0:11	Explosive atmospheres — Part 0: Equipment — General requirement
CAN/CSA-C22.2 No. 60079-15:12	Electrical apparatus for explosive gas atmospheres — Part 15: Construction, test and marking of type of protection “n” electrical apparatus
ANSI/UL 61010-1-2012 *Third Edition*	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use — Part 1: General Requirements
UL Subject 61010-2-201	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 2-201: Particular requirements for control equipment
ANSI/ISA-12.12.01-2007	Non-incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
ANSI/UL 60079-0-2013 *Sixth Edition (July 26, 2013)*	Explosive atmospheres – Part 0: Equipment – General requirements
ANSI/UL 60079-15-2009 *Fourth Edition (February 15, 2013)*	Electrical Apparatus for Explosive Gas Atmospheres – Part 15: Construction, Test and Marking of Type of Protection “n” Electrical Apparatus