Data Sheet

1 GENERAL INFORMATION AND APPLICATIONS

1.1 This data sheet is applicable to the S2000-KDL Multiplex Polling Loop Controller (hereinafter called the Controller) serving in the Orion Integrated Security System as a constituent part of a combined expansion addressable device designed for fire and intrusion protection at sites by: monitoring addressable inputs (Inputs) including addressable intrusion /fire detectors and/or supervised circuits (SC) of addressable expansion modules; control (via addressable outputs of actuation modules) and monitoring (via addressable inputs - addressable detectors and/or supervised circuits of addressable expansion modules) of fire protection systems (voice alarm, smoke removal, fire damper control, etc.).

1.2 The Polling Loop of the Controller supports up to 127 addressable devices.

1.3 The Controller works as an addressable device operated by a local security network controller in the Orion integrated security system. The network controller can be the S2000M Monitoring and Control Panel or the Orion Pro Suite.

1.4 Power supply for the Controller is provided with one or two (primary and backup) power supplies 12 or 24 V/DC.

1.5 The Controller does not produce any false messages if it is exposed to external electromagnetic noise rated as Severity Level III according to GOST R 50009.

1.6 The radio noise generated by the Controller does not exceed the level specified in GOST R 50009.

1.7 The Controller is designed for indoor installation in unheated premises and meant for 24/7 continuous operation. It is not designed to be used in aggressive, dust, explosive and fire-hazardous environments.

2 SPECIFICATIONS

- Up to 127 address points on the Polling Loop.
- Power supply voltage: 10.2 V/DC to 28.4 V/DC.
- Power consumption: up to 4 W.
- Current consumption of the Controller if powered from 12V power output:
  - Maximum value: up to 400 mA;
  - Average value when no addressable devices connected: 80 mA;
  - Average value when 127 addressable devices connected where each consumes 0.5 mA: 160 mA.
- Current consumption of the Controller if powered from 24V power output:
  - Maximum value: up to 200 mA;
  - Average value when no addressable devices connected: 40 mA;
  - Average value when 127 addressable devices connected where each consumes 0.5 mA: 80 mA.
- The Controller provides power for all connected addressable devices where total current consumption for all of them is no more than 64mA.
- Maximum output current of the polling loop: 100mA.
- Supports one credential.
- Supports Touch Memory (1-Wire, µ-LAN), Wiegand and ABA-Track II interfaces.
- Supports two reader LEDs.
- Polling loop length (maximum load):
  - Up to **160** m if cable with **0.2** mm^2 conductor is used (conductor diameter is 0.5 mm at least);
  - Up to **400** m if cable with **0.5** mm^2 conductor is used (conductor diameter is 0.8 mm at least);
  - Up to **600** m if cable with **0.75** mm^2 conductor is used (conductor diameter is 0.9 mm at least);
  - Up to **1,200** m if cable with **1.5** mm^2 conductor is used (conductor diameter is 1.4 mm at least).
- The weight of the Controller: 0.3 kg maximum.
- IP protection according to GOST 14254-2015 (IEC 529-89): IP40.
- Dimensions: maximum 156×107×39 mm.
- Operating temperatures: - 30°C до +55 °C.
- The content of precious materials: does not require accountability for storage, retirement and disposal.
- The content of non-ferrous metals: does not require accountability for retirement and further disposal.

The detailed description of functional features, settings and configuration parameters, operation modes, specifications and application features is provided in the S2000-KDL User's Manual.

The User's Manual and the UProg.exe configuration utility can be downloaded at http://bolid.ru in the section PRODUCTS at the page of S2000-KDL.

3 STANDARD DELIVERY

The standard delivery includes:

1) S2000-KDL Controller;
2) Datasheet with an acceptance stamp and specified factory number of the product;
3) Installation Manual;
4) Spare parts and accessories:
   – Screw 1-3×25.016 GOST 1144-80   x3
   – Nailing plug 6×30 (for screw of 3×25)   x3
   – Tapping screw GOST R ISO 7049 – ST2,9x9,5-St-C-H-A1A   x2

4   OPERATION INSTRUCTIONS

4.1 Mounting and settings for the Controller shall be provided in accordance with the User's Manual and RD 78.145-93.

4.2 The Controller does not have any circuits containing hazardous voltages.

4.3 **Mounting, connection, and maintenance may not be provided until the Controller power is OFF.**

5   MAINTENANCE

5.1 The maintenance service for the Controller shall be provided once per year to include the following:

– Inspection for physical damage and reliability of fastening, and terminals tightening;
– Cleaning of terminals and Controller's enclosure from dust, grease and corrosion;
– Functionality tests according to the test methods described in the User's Manual for the product.

6   SHIPMENT AND STORAGE

6.1 The Controller must be shipped by covered vehicles, in individual or multiple packages in accordance with requirements of shipping companies.

6.2 The storage of the Controller in a consumer package must be provided in accordance with Storage Conditions of Category 1 as per GOST 15150.

6.3 The storage facilities must be free from acid and alkaline fumes, aggressive gases and other corrosive-hazardous substances**.**

7   WARRANTY

7.1.1. The manufacturer guaranties the Controller meets with technical requirements specified in the manuals if the user follows the instructions for shipment, storage, installation, and usage.

7.2 The warranty period is 18 months since the day of putting into operation but no more than 24 months from the manufacturer's date of issue.

7.3 In case of any issues related to configuration and usage of the product, please contact with the technical support: +7 (495) 775-71-55 or e-mail: support@bolid.ru.

7.4 When submitting the Controller for repair, it shall be accompanied with descriptions of possible faults.

8   MANUFACTURER

This Controller is manufactured by NVP Bolid, Russia.

Pionerskaya #4, Korolyov city, Moscow region, Russia, 141070.

Phone/Fax: +7 (495) 775-71-55 (multiline), 516-93-72. E-mail: info@bolid.ru;   http://bolid.ru

9   CERTIFICATION INFORMATION

9.1 The S2000-KDL Polling Loop Controller complies with the requirements of Technical Regulations of Fire Safety Requirements (Federal Law No.123-FZ) and has Certificate of Conformity No. C-RU.ПБ01.В.02998 issued by OS POZHTEST FGBU VNIIPO Certification Agency of Russian Emergency Ministry.

9.2 The S2000-KDL Polling Loop Controller is included in Resource Software Suite automated utility metering system awarded with certificate for the approved metering tools RU.C.34.004.A No. 58498, issued by Russian Federal Agency for Technical Regulation and Metrology.

9.3 The S2000-KDL Polling Loop Controller is included in the S2000-VT temperature and humidity measuring and monitoring system certified as approved measurement means with certificate RU.C.32.004.A No 36369. The type of S2000-VT temperature and humidity systems is registered in national measurement means registration body under No. 41389-09.

9.4 The S2000-KDL Polling Loop Controller is included in the Orion addressable fire alarm system awarded with the Certificate of Conformity No. BY/112 02.01.033 00573 issued by Republic Licensed Activity Certification Center of Belarus Emergency Ministry.

9.5 The S2000-KDL Polling Loop Controller is included in the Orion addressable fire alarm system awarded with the Certificate of Conformity BY/112 03.11.023 01289.

9.6 The S2000-KDL Polling Loop Controller complies with the requirements of the Technical Regulations of the Customs Union TR CU 020/2011 and awarded with the Declaration of Conformity: ТС № RU Д-RU.ME61.В.00328.

9.7 The production of the Controllers is awarded with the Certificate of Conformity GOST R ISO 9001–2015 No POCC RU.АБ66.К00003 issued by POZHTEST QMS Certification Body.

10 ACCEPTANCE CERTIFICATE

The S2000-KDL Polling Loop Controller, serial No. _____ manufactured and accepted in accordance with requirements of national standards and applicable technical documentation is approved as ready for use and packaged by the Bolid Company.

Responsible for the acceptance and package

QCD   _____   _____

Name   Date/month/year