CAN/ULC 1981:2020 (R2025)

Standard for Signal Receiving Centre Automation System

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CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE

Standard for Signal Receiving Centre Automation System, CAN/ULC 1981

First Edition, Dated May 13, 2020

Summary of Topics

This reaffirmation of CAN/ULC 1981 dated May 1, 2025 is being issued to update the title page to reflect the reaffirmation of this First Edition National Standard of Canada. No changes in requirements are involved.

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The requirements are substantially in accordance with Proposal(s) on this subject dated February 7, 2025.

PLEASE NOTE THAT CERTAIN CODES MAY REFER TO A SUPERSEDED VERSION OF THIS STANDARD. IN THOSE INSTANCES, THE RELEVANT VERSIONS ARE AVAILABLE FOR PURCHASE.

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Standard for Signal Receiving Centre Automation System

ICS 35.240.99

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FIRST EDITION . . . . . **MAY 13, 2020**
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This list represents the membership at the time the Committee balloted on the final text of this edition. Since that time, changes in the membership may have occurred.

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PREFACE

This is the First Edition of the Standard for Signal Receiving Centre Automation System, CAN/ULC 1981.

This Edition of the Standard has been formally approved by the ULC Standards Committee on Security and Burglar Alarm Equipment and Systems.

This Standard has been developed in compliance with the requirements of SCC for accreditation of a Standards Development Organization.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

Annex A, identified as informative, is for information purposes only.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patent rights. ULC Standards shall not be held responsible for identifying any or all such patent rights.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

This CAN/ULC 1981 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

This Standard is intended to be used for conformity assessment.

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INTRODUCTION

1 Scope

1.1 This Standard covers the design, manufacture, implementation and support of Signal Receiving Centre Automation Software programs intended to be used in fire signal receiving centres, signal receiving centre burglar alarm systems, proprietary signal receiving centres, and satellite receiving centres for the reception, processing, dispatch, responses and record keeping of property protection and life safety signals. Signal Receiving Centre Automation Systems (SRCAS) record the processing of property protection and life safety signals. SRCAS are a combination of computerized automation software and subsystems, including Local Area Network (LAN) and Wide Area Network (WAN) communications under control of the signal receiving centre.

1.2 The requirements of this Standard do not apply to computer hardware units, signal receiving equipment and accessories and subsystems that are evaluated under separate equipment standards.

1.3 These requirements do not cover hardware units such as workstations, servers, network components, routers, and power supplies that are evaluated under separate equipment standards.

1.4 The requirements of this Standard do not cover software programs embedded in self-contained units such as stand-alone signal receivers provided that they are evaluated under separate standards.

1.5 These requirements do not cover the building needed to house the automation system, the staffing requirements, the power system(s), wiring expectations, spare parts, support policies, and any other requirement that falls outside the specifics of this automation standard. This information can be found within the latest editions of CAN/ULC-S301, Signal Receiving Centre Configurations and Operations and CAN/ULC 561, Standard for Installation and Services for Fire Signal Receiving Centres and Systems.

1.6 Software Components shall be evaluated to conform to operational requirements of CAN/ULC-S301, Signal Receiving Centre Configurations and Operations and CAN/ULC 561, Standard for Installation and Services for Fire Signal Receiving Centres and Systems.

2 Reference Publications

2.1 The documents shown below are referenced in the text of this Standard. Unless otherwise stated elsewhere in this Standard such reference shall be considered to indicate the edition and/or revisions of the document available at the date on which the Committee approved this ULC Standard.

Documents Published by ULC Standards
171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada
Telephone: (613) 755-2729
www.ulc.ca/ulcstandards

• CAN/ULC-S301:2018-REV1, *Standard for Signal Receiving Centres Configurations and Operations*

• CAN/ULC-S302-14-REV1, *Standard for the Installation, Inspection and Testing of Intrusion Alarm Systems*

• CAN/ULC 561-13-R2018, *Standard for Installation and Services for Fire Signal Receiving Centres and Systems*

Documents published by National Institute of Standards and Technology
100 Bureau Drive

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Gaithersburg, MD 20899 U.S.A.
Telephone: (301) 975-8443
www.nist.gov

• Cryptographic Algorithm Validation Program, 2016

Documents published by Underwriters Laboratories Inc.
333 Pfingsten Road, Northbrook, IL 60062-2096 U.S.A.
Telephone: (847) 272-8800
www.ul.com

• ANSI/UL 60950-1-2014, *Information Technology Equipment – Safety – Part 1: General Requirements*

• ANSI/UL 62368-1-2014, *Audio/Video, Information and Communication Technology Equipment – Part 1: Safety Requirements*

3 Glossary

NOTE: Terms used in this Standard that are in italic print are defined as follows:

3.1 ALARM MONITORING SOFTWARE – The sequence of instructions that tells the hardware how to handle the incoming signals and instructions from a workstation. The alarm monitoring software controls how the messages are stored in memory and how they are displayed at the operator station and printers.

3.2 ALARM SIGNAL – A signal from a security or fire alarm system which requires action.

3.3 AUTOMATION SYSTEM – See SRCAS.

3.4 AUTOMATION SYSTEM SOFTWARE DEVELOPER – A company that develops the alarm monitoring software and specifies the minimum hardware platform specifications required for the combination of hardware and software to process signals from a subscriber's account in accordance with:

a) CAN/ULC 561, Standard for Installation and Services for Fire Signal Receiving Centres and Systems; and

b) CAN/ULC-S301, Standard for Signal Receiving Centre Configurations and Operations

c) The requirements of this standard.

3.5 BATCH ALARM CLEAR – A process or utility that allows batch clearing of alarms by type, geographical area and/or priority.

3.6 CHECK IN SIGNAL – A signal that is periodically sent by the alarm system to verify the transmission equipment at the protected property and the communication path are operational.

3.7 FAULT-TOLERANT COMPUTER SYSTEM – A computer system containing multiple power supplies, disks, processors, and controllers, each backing-up and checking on the processes of the others. In the event of a component failure, the other modules take over the job performed by the failed component without affecting the operation of the computer. In addition to the duplicate hardware, a fault-tolerant system includes software components consisting of the operating system, programming languages, and the alarm-monitoring software supplied by the automation system software developer required to make the system operational.

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