



**CORRECTIONAL SERVICES CANADA
TECHNICAL SERVICES BRANCH
ELECTRONIC SECURITY SYSTEMS**



ES/STD-0205
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**ELECTRONIC ENGINEERING STANDARD
FIXED OUTDOOR CAMERA ENCLOSURE
FOR USE IN FEDERAL CORRECTIONAL INSTITUTIONS**

AUTHORITY

This Standard is approved by the Correctional Service Canada for the procurement and installation of this item in Canadian federal correctional institutions.

Recommended corrections, additions or deletions should be addressed to the Design Authority at the following address:

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TABLE OF REVISIONS

Revision	Paragraph	Comment
0		Original issue
1	3.2	Condensing humidity from 95% to 100%
	7.1	Maximum maintained internal temperature from 40 to 50°C
2	All	Reformat and rationalization

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TABLE OF ABBREVIATIONS

Abbreviation	Expansion
CSC	Correctional Service Canada
FoV	Field of View
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers

TABLE OF DEFINITIONS

Term	Definition
Design Authority	Director, Electronics Security Systems

1 INTRODUCTION

1.1 Overview

- .1 This standard defines the requirements of Correctional Service Canada (CSC) for an outdoor fixed camera enclosure for use at federal correctional institutions.

1.2 Purpose

- .1 These enclosures are for deployment in outdoor fixed camera locations such as:
 - .1 facility perimeter; and
 - .2 outdoor walkways.
- .2 These enclosures are for Fixed Network Colour Cameras for Enclosures (ES/STD-0221).

2 REFERENCES

2.1 Specifications, Standards, and Statements of Work

- .1 Access to non-government specifications is the responsibility of the contractor.

Number	Title
IEC EN60529	International Electrotechnical Commission Degrees of protection provided by enclosures (IP Code)
IEC EN60950-1	International Electrotechnical Commission Information technology equipment – Safety
IEC EN62262	International Electrotechnical Commission Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts
IEEE 802.3at	IEEE Standard for Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications Amendment 3: Data Terminal Equipment (DTE) Power via the Media Dependent Interface (MDI) Enhancements
IEEE 802.3u	IEEE Standards for Local and Metropolitan Area Networks: Supplement to Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications Media Access Control (MAC) Parameters, Physical Layer, Medium Attachment Units, and Repeater for 100 Mb/s Operation, Type 100BASE-T
ES/STD-0221	Electronics Engineering Standards Fixed Network Colour Camera for Enclosures

3 PHYSICAL

3.1 Dimensions

- .1 The enclosure must:
 - .1 measure less than 300mm high;
 - .2 measure less than 300mm wide;
 - .3 measure less than 800mm long;
- .2 The enclosure window opening must:
 - .1 pass the camera's complete Field of View (FoV);
 - .2 include a wiper;
 - .3 include a sun shield (include in the enclosure measurements);
- .3 The enclosure camera mount must:
 - .1 include an adjustable camera mount;
 - .2 have ¼-20 threaded mounting holes;
 - .3 include elevation blocks for large lens/low optical centre-line cameras;

3.2 Environment

- .1 The enclosure must:
 - .1 have a permanently affixed label on the exterior of the unit which identifies the manufacturer, the model or assembly number, the serial number and the power requirement;
 - .2 have a permanently affixed label on the interior of the unit which identifies the manufacturer, the model or assembly number, the serial number and the power requirement;
 - .3 operate for external temperatures between -40°C to 50°C;
 - .4 meet or exceed IEC EN60529 IP66 dust and water resistance when mounted;

3.3 Interference

- .1 The enclosure must operate correctly in the presence of:
 - .1 5 watt CB transceiver at 1 metre or more;
 - .2 6 watt VHF and UHF transceivers at 1 metre or more;
 - .3 25 mW 400-450 MHz Personal Portable Transmitters at 1 metre or more;
 - .4 Other radio frequency transmitting, receiving, and distribution equipment at 5 metres or more;
 - .5 Computer work stations at 5 metres or more;

3.4 Reliability

- .1 The enclosure must have an MTBF of at least 25,000 hours.

3.5 Safety

- .1 The enclosure must meet IEC 60950-1 or the CSA equivalent.

4 OPERATIONAL

4.1 Enclosure

- .1 The enclosure must:
 - .1 be capable of continuous operation;
 - .2 maintain an internal temperature between 5°C to 50°C for defined operational temperature range;
 - .3 start and operate from 0 to 100% condensing humidity;
 - .4 prevent ice, snow, and condensation on the enclosure window;

4.2 Wiper

- .1 The enclosure wiper must be remotely controllable;

5 INTERFACE

5.1 Ports

- .1 The enclosure does not require an output for camera power.

5.2 Power

- .1 The enclosure must use less than 150W excluding any camera power.