Title	**Explain the purpose and application of electronic security devices**		
Level	**3**	**Credits**	**5**

Purpose	This unit standard is intended for the training and assessment of people working in or intending to work in the electronic security industry and covers knowledge of electronic security devices. People credited with this unit standard are able to explain the purpose and application of: – electronic intruder alarm system devices; – electronic access control system devices; – surveillance system devices; and – intercom system devices.

Classification	Electronic Engineering > Electronic Security

Available grade	Achieved

Guidance Information

1 This unit standard has been developed for learning and assessment off-job.

2 Persons working or intending to work in private security need either a Company Licence, an Individual Licence (for Sole Traders) or a Certificate of Approval (for employees of companies). These licences are issued by the Private Security Personnel Licensing Authority available through: www.justice.govt.nz/tribunals/licences-certificates/pspla/.

3 Definitions
I/O – input output.
Safe and sound practice – as it relates to the installation of electrical equipment is defined in AS/NZS 3000:2007, *Electrical Installations (known as the Australian/New Zealand Wiring Rules).*
Surveillance systems may include but are not limited to – camera fixed lens, auto iris lens, video monitor, video intercom, lighting.

4 References – Specific to Electronic Security Industry
Code of Practice for Electro-Mechanical Controlled Locking Devices on Egress Doors (2018);
FPANZ Code of Practice for the Integration of Building Fire Safety Systems with Other Services (2022);
Industry Code of Practice for Access Controlled Doors and Compliance: Schedule Reference Guide (2021);
New Zealand Security Association (Inc), *Code of Practice - Security Systems:*

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Electronic and Physical (2022);
Codes of Practice available from: Guidelines, Codes of Practice and Standards | NZ Security Association.
AS/NZS 2201.1:2007, *Intruder alarm systems – Client's premises – Design, installation, commissioning and maintenance;*
AS/NZS 2201.5:2008, *Intruder alarm systems – Alarm transmission systems;*
AS/NZS 62767.1.1:2020 – *Video Surveillance Systems for use in Security Applications – Part 1-1: System Requirements – General*;
AS/NZS IEC 60839.11.1:2019 – *Alarm and Electronic Security Systems, Part 11.1: Electrical;*
AS/NZS IEC 60839.11.2:2019 – *Alarm and Electronic Security Systems, Part 11.2: Electrical Access Control Systems – Application Guidelines;*
AS/NZS IEC 60839.11.31:2020 – *Alarm and Electronic Security Systems, Part 11.3: Electronic Access Control Systems – Core interoperability Protocol;*AS/NZS IEC 62676.2.2:2020 – *Video Surveillance Systems for use in Security Applications – Part 2-2: Video Transmission Protocols – IP Interoperability Implementation based on HTTP and REST Services*;
NZS-4512-2021- *Fire Detection and Alarm Systems in Buildings*;
NZS-4514-2021- *Interconnected Smoke Alarms for Houses;*
and all subsequent amendments and replacements.

References – General to Electronic Security Industry
Building Act 2004;
Electricity (Safety) Regulations 2010;
Health and Safety at Work Act 2015;
Private Security Personnel and Private Investigators Act 2010;
Privacy Act 2020;
AS/NZS 3000:2007, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*;
AS/NZS ISO 31000:2009 – Risk Management Principles and Guidelines;
AS/NZS 3016:2002 – Electrical Installations – Electrical Security Fences;
Telecommunications Act 2001;
Local territorial authority requirements;
and all subsequent amendments and replacements.
Standards available from Standards New Zealand.

5 Range
- a Candidates must refer to current legislation and Standards during assessment.
- b All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
  - i legislation;
  - ii policies and procedures;
  - iii ethical codes;
  - iv Standards;
  - v safe and sound practice;
  - vi applicable site, enterprise, and industry practice; and,
  - vii where appropriate, manufacturer instructions, specifications, and data sheets.

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Outcomes and performance criteria

Outcome 1

Explain the purpose and application of electronic intruder alarm system devices.

Range intruder alarm system devices include but are not limited to – passive infra-red (PIR) detector, smoke detector, microwave detector, point-to-point beam, outdoor detectors, duress switch, reed switch, keypad, glass break sensor, seismic sensor, dual detector, internal and external siren, piezo, alarm panels, I/O monitoring devices, device software programmes;
evidence of 10 devices is required.

Performance criteria

1.1 Explain the purpose of each system device.

1.2 Explain typical applications of each selected system device.

Range evidence is required of two applications for each selected device, including environmental considerations.

1.3 Explain the connection and adjustment requirements, where applicable, for each selected system device.

Outcome 2

Explain the purpose and application of electronic access control system devices.

Range access control system devices include but are not limited to – electric strikes, electric mortise locks, credential reader (may be key, card, tag, biometric, or mobile), egress switch, emergency door release device, reed switch, bond sensor, magnetic clamps, power supply, motor driven electronic locks;
evidence of six devices is required.

Performance criteria

2.1 Explain the purpose of each system device.

2.2 Explain typical applications of each system device.

Range evidence is required of two applications for each selected device, including environmental considerations.

2.3 Explain the connection and adjustment requirements, where applicable, for each selected system device.

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Outcome 3

Explain the purpose and application of surveillance system devices.

Range digital cameras and lenses, cabling systems, power supplies, recording systems, display systems, simple network solutions.

Performance criteria

3.1 Explain the purpose of each system device.

3.2 Explain typical applications of each system device.

Range evidence is required of two applications for each device, including environmental considerations.

3.3 Explain the connection and adjustment requirements, where applicable, for each selected system device.

Outcome 4

Explain the purpose and application of intercom system devices.

Range intercom system devices include but are not limited to – audio intercom, video intercom, locking interface, master station, substation, door station, smart-phone applications.

Performance criteria

4.1 Explain the purpose of each system device.

4.2 Explain typical applications of each system device.

Range evidence is required of two applications for each device, including environmental considerations.

4.3 Explain the connection and adjustment requirements, where applicable, for each selected system device.

Planned review date	31 December 2029

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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 November 1997	31 December 2011
Revision	2	3 April 2001	31 December 2011
Revision	3	11 March 2004	31 December 2012
Rollover	4	21 November 2008	31 December 2012
Review	5	19 November 2010	31 December 2022
Revision	6	17 June 2011	31 December 2022
Review	7	14 December 2017	31 December 2026
Rollover and Revision	8	27 October 2022	31 December 2026
Review	9	26 September 2024	N/A

Consent and Moderation Requirements (CMR) reference	0003

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council qualifications@waihangaararau.nz if you wish to suggest changes to the content of this unit standard.

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