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DRAFT

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ISO/TC 215

Secretariat: ANSI

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2022-01-31

**Health informatics — Device  
interoperability —**

**Part 40102:  
Foundational — Cybersecurity —  
Capabilities for mitigation**

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## Health informatics—Device interoperability

# Part 40102: Foundational—Cybersecurity— Capabilities for mitigation

Developed by the

**IEEE 11073 Standards Committee**

of the

**IEEE Engineering in Medicine and Biology Society**

Approved 24 September 2020

**IEEE SA Standards Board**

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**Abstract:** For Personal Health Devices (PHDs) and Point-of-Care Devices (PoCDs), a security baseline of application layer cybersecurity mitigation techniques is defined by this standard for certain use cases or for times when certain criteria are met. The mitigation techniques are based on an extended confidentiality, integrity, and availability (CIA) triad and are described generally to allow manufacturers to determine the most appropriate algorithms and implementations. A scalable information security toolbox appropriate for PHD/PoCD interfaces is specified that fulfills the intersection of requirements and recommendations from the National Institute of Standards and Technology (NIST) and the European Network and Information Security Agency (ENISA). A mapping of this standard to the NIST cybersecurity framework; IEC TR 80001-2-2; and the Spoofing, Tampering, Repudiation, Information Disclosure, Denial of Service, and Elevation of Privilege (STRIDE) classification scheme is defined.

**Keywords:** cybersecurity, IEEE 11073-40102™, medical device communication, mitigation techniques, Personal Health Devices, Point-of-Care Devices

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