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Health informatics — Device interoperability —

Part 10103: Nomenclature, implantable device, cardiac

Informatique de santé — Interopérabilité des dispositifs —
Partie 10103: Nomenclature, dispositif implantable, cardiaque

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ISO/IEEE 11073-10103 was prepared by the *IEEE 11073 Standards Committee of the IEEE Engineering in Medicine and Biology Society* (as IEEE Std 11073-10103-2023) and drafted in accordance with its editorial rules. It was adopted, under the "fast-track procedure" defined in the Partner Standards Development Organization cooperation agreement between ISO and IEEE, by Technical Committee ISO/TC 215, *Health informatics*.

This second edition cancels and replaces the first edition (ISO/IEEE 11073-10103:2014), which has been technically revised.

The main changes are as follows:

— new nomenclature (including discriminators, co-constraints, and enumeration as appropriate):

  — device advisory information and UDI;
  — lead advisory information and UDI;
  — battery remaining timeframes and date of RRT;
  — CRT multisite pacing status and LVLV delay;
  — LV multisite pacing settings;

- blanking and refractory settings;
- AF suppression and RV pace avoidance algorithm setting information;
- statistics for ventricular rates during atrial tachyarrhythmias and mode switch mode;
- multiple tachycardia therapy statistics (e.g. shocks, ATPs, recent, total);
- multiple episode-related information (e.g. shocks delivered, ATPs delivered, atrial/ventricular intervals);
- episode in progress flagNotifications (new containment node);
- nomenclature versioning (new containment node);
- vendor-specific enumerations;

— clarified definitions of reference IDs;

— added nomenclature version information and example values to the base terms table;

— added implementation notes Annex G;

— removed schema and XML terms annexes that were used to help publish the original nomenclature but were not part of the nomenclature;

— updated the units of measure and ensured all units have UCUM and MDC reference and term codes;

— updated example report Annex F;

— added multiple implementation notes in Annex G.

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IEEE Std 11073-10103™-2023
(Revision of IEEE Std 11073-10103-2012)

Health Informatics—Device Interoperability

Part 10103: Point-of-Care Medical Device Communication—Nomenclature—Implantable Device, Cardiac

Developed by the

IEEE 11073™ Standards Committee
of the
IEEE Engineering in Medicine and Biology Society

Approved 8 November 2023

IEEE SA Standards Board

Abstract: The base nomenclature provided in IEEE 11073 to support terminology for implantable cardiac devices is extended in this standard. Devices within the scope of this nomenclature are implantable devices such as pacemakers, defibrillators, devices for cardiac resynchronization therapy, and implantable cardiac monitors. The discrete terms necessary to convey a clinically relevant summary of the information obtained during a device interrogation are defined in this nomenclature. To improve workflow efficiencies, cardiology and electrophysiology practices require the management of summary interrogation information from all vendor devices and systems in a central system such as an Electronic Health Records (EHR) system or a device clinic management system. To address this requirement, the Implantable Device, Cardiac (IDC) Nomenclature defines a standard-based terminology for device data. The nomenclature facilitates the transfer of data from the vendor proprietary systems to the clinic EHR or device clinic management system.

Keywords: cardiac resynchronization therapy, codes, CRT, follow-up, home monitoring, ICD, IDC, IEEE 11073-10103™, implantable cardioverter defibrillator, implantable devices, implantable device cardiac, medical device communication, nomenclature, pacemaker, remote follow-up, remote monitoring, terminology

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