

## BUREAU OF INDIAN STANDARDS

### Program of Work

#### LITD 33 : Wearable electronic devices and technologies

**Scope:** Standardization in the field of (i) wearable electronic devices and technologies which include patchable materials and devices, implantable materials and devices, ingestible materials and devices, and electronic textile materials and devices, and (ii) printed electronics - terminology, materials, processes, equipment, products and health/ safety/ sustainability

**Liaison:** **IEC TC-IEC TC 124 (P):** *Wearable electronic devices and technologies* **IEC TC-IEC TC (P):** *Printed Electronics*

### Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS/IEC 63203-101-1):2021 IEC 63203-101-1:2021 IEC 63203-101-1:2021	Wearable Electronic Devices and Technologies Part 101: Section1: Terminology		-	Identical under single numbering
2	IS/IEC 63203-201-1):2022 IEC 63203-201-1: 2022 IEC 63203-201-1: 2022	Wearable Electronic Devices and Technologies Part 201: Electronic Textile Section 1: Measurement Methods for Basic Properties of Conductive Yarns		-	Identical under single numbering
3	IS/IEC 63203-201-2):2022 IEC 63203-201-2: 2022 IEC 63203-201-2: 2022	Wearable electronic devices and technologies Part 201-2: Electronic textile Section 2: Measurement methods for basic properties of conductive fabrics and insulation materials		-	Identical under single numbering
4	IS/IEC 63203-201-3):2021 IEC 63203-201-3: 2021 IEC 63203-201-3: 2021	Wearable electronic devices and technologies Part 201 Electronic textile Section 3:Determination of electrical resistance of conductive textiles under simulated microclimate		-	Identical under single numbering
5	IS/IEC 63203-204-1):2023 IEC 63203-204-1: 2023 IEC 63203-204-1: 2023	Wearable electronic devices and technologies Part 204 Electronic textile Section 1: Test method for assessing washing durability of E-textile products		-	Identical under single numbering
6	IS/IEC/TR 63203-250-1):2021 IEC TR 63203-250-1:2021	Wearable electronic devices and technologies Part 250 Electronic textile Section 1: Snap fastener connectors between e-textiles and		-	Identical under single numbering

	IEC TR 63203-250-1:2021	detachable electronic devices			
7	IS/IEC 63203-401-1):2023 IEC 63203-401-1:2023 IEC 63203-401-1:2023	Wearable electronic devices and technologies Part 401: Devices and systems: functional elements Section 1: Evaluation method of the stretchable resistive strain sensor		-	Identical under single numbering
8	IS/IEC 63203-402-1):2022 IEC 63203-402-1:2022 IEC 63203-402-1:2022	Wearable electronic devices and technologies Part 402 : Performance measurement of fitness wearables Section 1: Test methods of glove-type motion sensors for measuring finger movements		-	Identical under single numbering
9	IS/IEC 63203-406-1):2021 IEC 63203-406-1:2021 IEC 63203-406-1:2021	Wearable electronic devices and technologies Part 406: Test method for measuring surface temperature of wrist- Section 1: worn wearable electronic devices while in contact with human skin		-	Identical under single numbering
10	IS/IEC 63203-801-1):2022 IEC 63203-801-1:2022 IEC 63203-801-1:2022	Wearable electronic devices and technologies Part 801: Smart body area network SmartBAN Section 1: Enhanced ultra-low power physical layer		-	Identical under single numbering
11	IS/IEC 63203-801-2):2022 IEC 63203-801-2:2022 IEC 63203-801-2:2022	Wearable electronic devices and technologies Part 801: Smart body area network SmartBAN Section 2: Low complexity medium access control MAC for SmartBAN		-	Identical under single numbering

### Standards under Development

#### Projects Approved

SI. No.	Doc No.	Title
No Records Found		

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
No Records Found		

#### Drafts Standards in WC Stage

SI. No.	Doc No.	Title
No Records Found		

#### Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
No Records Found		

#### Finalized Draft Indian Standard

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print		
SI. No.	Doc No.	Title
1	LITD 33 (27090)	Writable Functional Inks for Pens Conductive and Resistive
2	LITD 33 (33537)	Wearable electronic devices and technologies - Part 402-3 Performance measurement of fitness wearables - Test methods for the determination of the accuracy of heart rate
3	LITD 33 (33538)	Wearable electronic devices and technologies - Part 402-2 Performance measurement of fitness wearables - Step counting
4	LITD 33 (33539)	Wearable electronic devices and technologies Part 201-4 Electronic textile Test method for determining sheet resistance of conductive fabrics after abrasion
5	LITD 33 (33541)	Wearable electronic devices and technologies - Part 204-2 Electronic textile - Test method to characterize electrical resistance change in knee and elbow bending test of e-textiles

Total Published Standards:0	Total Standards Under development:5
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Aspect Wise Report	
Product	: 0
Code of Practices	: 0
Methods of Test	: 0
Terminology	: 0
Dimensions	: 0
System Standard	: 0
Safety Standard	: 0
Others	: 11
Service Specification	: 0
Process Specification	: 0
Unclassified	: 0

Annexure-I :List of Indian Standards Withdrawn/Superseded		
SI. No.	IS No. & Year	Title
No Records Found		

Annexure-II :List of Indian Product Standards		
SI. No.	IS No. & Year	Title
No Records Found		