

BUREAU OF INDIAN STANDARDS

Program of Work

LITD 10 : Power System Control And Associated Communications

Scope: To prepare Indian Standards relating to: a) Power system control equipment and systems including EMS (Energy Management System) b) DMS (Distribution Management System) c) SCADA (Supervisory Control and Data Acquisition) d) Distribution automation, Smart Grid, teleprotection and associated communications used in planning, operation and maintenance of power systems.

Liaison: **IEC TC-IEC TC (P):** *Power systems management and associated information exchange* **IEC TC-IEC SyC Smart Energy (P):** *Smart Energy*

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 12746 (Part 1/Sec 1):1999 IEC 60870-1-1 Reviewed In : 2024 IEC 60870-1-1 : 1988	Telecontrol equipment and systems: Part 1 general considerations: Sec 1 general principles	January, 2024	-	Identical under dual numbering
2	IS 12746 (Part 1/Sec 2):1993 IEC 60870-1-2 Reviewed In : 2025 IEC 60870-1-2 : 1989	Telecontrol equipment and systems: Part 1 general considerations: Sec 2 guide for specifications	August, 2025	-	Identical under dual numbering
3	IS 12746 (Part 1/Sec 3):2020 IEC 60870-1-3 : 1997 Reviewed In : 2023 IEC 60870-1-3 : 1997	Telecontrol Equipment and Systems Part 1 General Considerations Section 3 Glossary (First Revision)	July, 2023	-	Identical under dual numbering
4	IS 12746 (Part 2):2023 IEC 60870-2-1:1995 IEC 60870-2-1:1995	Telecontrol equipment and systems Part 2: Operating conditions -Section 1: Power supply and electromagnetic compatibility		-	Identical under single numbering
5	IS 12746 (Part 3):1995 IEC 60870-3 Reviewed In : 2023 IEC 60870-3:1989	Telecontrol equipment and systems: Part 3 interfaces (Electrical Characteristics)	March, 2023	-	Identical under dual numbering
6	IS 12746 (Part 4):1993 IEC 60870-4 Reviewed In : 2025	Telecontrol equipment and systems: Part 4 performance requirements	September, 2025	-	Identical under dual numbering

	IEC 60870-4:1990				
7	IS 12746 (Part 5/Sec 1):1993 IEC 60870-5-1 Reviewed In : 2025 IEC 60870-5-1:1990	Telecontrol equipment and systems: Part 5 transmission protocols: Sec 1 transmission frame formats	August, 2025	-	Identical under dual numbering
8	IS 12746 (Part 5/Sec 2):1998 IEC 60870-5-2 Reviewed In : 2025 IEC 60870-5-2:1992	Telecontrol equipment and systems: Part 5 transmission protocols: Sec 2 link transmission procedure	June, 2025	-	Identical under dual numbering
9	IS 12746 (Part 5/Sec 3):1998 IEC 60870-5-3 Reviewed In : 2025 IEC 60870-5-3:1992	Telecontrol equipment and systems: Part 5 transmission protocols: Sec 3 general structure of application data	July, 2025	-	Identical under dual numbering
10	IS 14392:1996 IEC 61085 Reviewed In : 2023 IEC 61085	General considerations for telecommunication services for electric power systems	March, 2023	-	Identical under dual numbering
11	IS 15654:2006 Reviewed In : 2021	Supervisory Control and Data Acquisition (SCADA) System for Oil and Gas Pipeline	March, 2021	-	Indigenous
12	IS 15655:2006 Reviewed In : 2021	Telecommunication facilities for operation and maintenance of oil and gas pipeline	March, 2021	-	Indigenous
13	IS 15953:2011 Reviewed In : 2023	Supervisory control and data acquisition (SCADA) system for power system applications	October, 2023	-	Indigenous
14	IS 16334:2015 Reviewed In : 2023	Power system communications - Interoperability - Guidelines	May, 2023	-	Indigenous
15	IS 16335:2015 Reviewed In : 2023	Power control systems - Security requirements	May, 2023	-	Indigenous
16	IS 16336 (Part 1):2015 Reviewed In : 2023	Common information model (CIM) for information exchange in the context of electrical utilities: Part 1 companion specification	May, 2023	-	Indigenous
17	IS 16336 (Part 2):2015 Reviewed In : 2023	Common information model (CIM) for information exchange in the context of electrical utilities: Part 2 CIM Extensions for ABT based regulated markets and load shedding and restoration mechanism	May, 2023	-	Indigenous
18	IS 16336 (Part 3):2018 Reviewed In : 2022	Common Information Model (CIM) for Information Exchange in the Context of Electrical Utilities Part 3 Application Use Cases for System Operation	June, 2022	-	Indigenous
19	IS 17648:2021	Guideline for distributed management system in the context of electrical utilities		-	Indigenous
20	IS 18058:2023	Guidelines for Supervisory Control and Data Acquisition (SCADA) System Displays		1	Indigenous
21	IS 1885 (Part 50):2021 IEC 60050-371:1984 Reviewed In : 2024	Electrotechnical Vocabulary Part 371 Telecontrol	December, 2024	-	Identical under dual numbering

	IEC 60050-371:1984				
22	IS/IEC 60834-1:1999 IEC 60834-1: 1999 IEC 60834-1: 1999	Teleprotection equipment of power systems Performance and testing Part 1: Command systems		-	Identical under single numbering
23	IS/IEC/TS 60870-5-7:2013 IEC TS 60870-5-7:2013 Reviewed In : 2024 IEC TS 60870-5-7:2013	Telecontrol equipment and systems Part 5-7: Transmission protocols Security extensions to IEC 60870-5-101 and IEC 60870-5-104 protocols applying IEC 62351	September, 2024	-	Identical under single numbering
24	IS/IEC/TR 61850-1:2013 IEC/TR 61850-1 : 2013 Reviewed In : 2023 IEC/TR 61850 -1 : 2013	Communication networks and systems for power utility automation: Part 1 introduction and overview	August, 2023	-	Identical under single numbering
25	IS/IEC/TS 61850-2:2019 IEC 61850-2:2019 IEC 61850-2:2019	Communication Networks and Systems in substations Part 2 Glossary		-	Identical under single numbering
26	IS/IEC 61850-3:2013 IEC 61850-3 : 2013 Reviewed In : 2023 IEC 61850 - 3 : 2013	Communication networks and systems for power utility automation: Part 3 general requirements	July, 2023	-	Identical under single numbering
27	IS/IEC 61850-4:2020 IEC 61850-4:2020 IEC 61850-4:2020	COMMUNICATION NETWORKS AND SYSTEMS FOR POWER UTILITY AUTOMATION Part 4: System and project management		-	Identical under single numbering
28	IS/IEC 61850-5:2022 IEC 61850-5:2022 IEC 61850-5:2022	Communication networks and systems for power utility automation Part 5: Communication requirements for functions and device models First Revision		-	Identical under single numbering
29	IS/IEC 61968-1:2020 IEC 61968-1:2020 IEC 61968-1:2020	Application integration at electric utilities System Interfaces for distribution management Part 1: Interface architecture and general recommendations		-	Identical under single numbering
30	IS/IEC 61968-2:2011 IEC 61968-2 : 2011 Reviewed In : 2023 IEC TS 61968 : Part 2 : 2011	Application integration at electric utilities - System interfaces for distribution management: Part 2 glossary	May, 2023	-	Identical under single numbering
31	IS/IEC 61968-3:2021 IEC 61968-3:2021 IEC 61968-3:2021	Application integration at electric utilities System interfaces for distribution management Part 3: Interface for network operations		-	Identical under single numbering
32	IS/IEC 61968-4:2019 IEC 61968-4:2019 IEC 61968-4:2019	Application integration at electric utilities System Interfaces for distribution management Part 4: Interfaces for records and asset management		-	Identical under single numbering
33	IS/IEC	Application integration at electric	May, 2023	-	Identical under single

	61968-6:2015 IEC 61968-6 : 2015 Reviewed In : 2023 IEC 61968 : Part 6 : 2015	utilities - System interfaces for distribution management: Part 6 interfaces for maintenance and construction			numbering
34	IS/IEC 61968-8:2015 Reviewed In : 2023 IEC 61968 : Part 8 : 2015	Application integration at electric utilities - System interfaces for distribution management: Part 8 interfaces for customer operations	December, 2023	-	Identical under single numbering
35	IS/IEC 61968-9:2013 IEC 61968-9 : 2013 Reviewed In : 2023 IEC 61968 : Part 9 : 2013	Application integration at electric utilities - System interfaces for distribution management: Part 9 interfaces for meter reading and control	August, 2023	-	Identical under single numbering
36	IS/IEC 61970-1:2005 IEC 61970-1 : 2005 Reviewed In : 2024 IEC 61970-1 : 2005	Energy management system application program interface (EMS - API): Part 1 guidelines and general requirements	September, 2024	-	Identical under dual numbering
37	IS/IEC/TS 61970-2:2004 IEC/TS/61970-2 : 2004 Reviewed In : 2024 IEC/TS/61970-2 : 2004	Energy Management System Application Programme Interface (EMS-API) Part 2 Glossary	January, 2024	-	Identical under dual numbering
38	IS/IEC 61970-301:2022 IEC 61970-301:2022 IEC 61970-301:2022	Energy management system application program interface EMS-API Part 301: Common information model CIM base		-	Identical under single numbering
39	IS/IEC/TS 61970-401:2022 IEC/TS 61970-401:2022 IEC/TS 61970-401:2022	Energy management system application program interface EMS-API Part 401: Profile framework First Revision		-	Identical under single numbering
40	IS/IEC 61970-452:2021 IEC 61970-452:2021 IEC 61970-452:2021	Energy management system application program interface EMS-API Part 452: CIM static transmission network model profiles		-	Identical under single numbering
41	IS/IEC 61970:2017 IEC 61970-452:2017 IEC 61970-452:2021	Energy management system application program interface EMS-API - Part 452: CIM static transmission network model profiles		-	Identical under single numbering
42	IS/IEC/TS 62351-1:2007 Reviewed In : 2025 IEC/TS 62351-1:2007	Power systems management and associated information exchange - Data and communications: Security: Part 1 communication network and system: Security - Introduction to: Security issues	June, 2025	-	Identical under single numbering
43	IS/IEC/TS 62351-2:2008 Reviewed In : 2025	Power systems management and associated information exchange - Data and communications:	June, 2025	-	Identical under single numbering

	IEC/TS 62351-2:2008	Security: Part 2 glossary of terms			
44	IS/IEC 62351-3:2023 IEC 62351-3:2023 IEC 62351-3:2023	Power systems management and associated information exchange - Data and communications security - Part 3: Communication network and system security - Profiles including TCPIP (Third Revision)		-	Identical under single numbering
45	IS/IEC/TS 62351-4:2020 IEC 62351-4:2020 Reviewed In : 2024 IEC 62351-4:2020	Power systems management and associated information exchange - Data and communications security - Part 4: Profiles including MMS and derivatives	December, 2024	-	Identical under single numbering
46	IS/IEC/TS 62351-5:2023 IEC/TS 62351-5:2023 IEC/TS 62351-5:2023	Power systems management and associated information exchange Data and communications security Part 5: Security for IEC 60870-5 and derivatives Second Revision		-	Identical under single numbering
47	IS/IEC 62351-6:2020 IEC 62351-6:2020 Reviewed In : 2024 IEC 62351-6:2020	POWER SYSTEMS MANAGEMENT AND ASSOCIATED INFORMATION EXCHANGE DATA AND COMMUNICATION SECURITY Part 6: Security for IEC 61850	November, 2024	-	Identical under single numbering
48	IS/IEC 62351-7:2017 IEC 62351-7:2017 Reviewed In : 2024 IEC 62351-7:2017	Power systems management and associated information exchange Data and communications security Part 7: Network and System Management NSM data object models	December, 2024	-	Identical under single numbering
49	IS/IEC 62351-8:2020 IEC 62351-8:2020 Reviewed In : 2024 IEC 62351-8:2020	Power systems management and associated information exchange Data and communications security Part 8: Role-based access control for power system management	August, 2024	-	Identical under single numbering
50	IS/IEC 62351-9:2023 IS/IEC 62351-9:2023 IS/IEC 62351-9:2023	Power systems management and associated information exchange - Data and communications security - Part 9: Cyber security key management for power system equipment (First Revision)		-	Identical under single numbering
51	IS/IEC/TR 62351-10:2012 IEC TR 62351-10:2012 Reviewed In : 2024 IEC TR 62351-10:2012	Power systems management and associated information exchange - Data and communications security Part 10: Security architecture guidelines	August, 2024	-	Identical under single numbering
52	IS/IEC 62351-11:2016 IEC 62351-11:2016 Reviewed In : 2024 IEC 62351-11:2016	Power systems management and associated information exchange Data and communications security Part 11: Security for XML documents	September, 2024	-	Identical under single numbering
53	IS/IEC/TR 62351-12:2016 IEC TR 62351-12:2016 Reviewed In : 2024	Power systems management and associated information exchange Data and communications security Part 12: Resilience and security recommendations for power	September, 2024	-	Identical under single numbering

	IEC TR 62351-12:2016	systems with distributed energy resources DER cyber-physical systems			
54	IS/IEC/TR 62351-13:2016 IEC TR 62351-13:2016 Reviewed In : 2024 IEC TR 62351-13:2016	Power systems management and associated information exchange - Data and communications security Part 13: Guidelines on security topics to be covered in standards and specifications	September, 2024	-	Identical under single numbering
55	IS/IEC/TR 62351-90-1:2018 IEC TR 62351-90-1:20 Reviewed In : 2024 IEC TR 62351-90-1:20	Power systems management and associated information exchange -Data and communications security Part 90-1: Guidelines for handling role-based access control in power systems	November, 2024	-	Identical under single numbering
56	IS/IEC/TR 62351-90-2:2018 IEC TR 62351-90-2:20 Reviewed In : 2024 IEC TR 62351-90-2:2018	Power systems management and associated information exchange Data and communications security Part 90-2: Deep packet inspection of encrypted communications	August, 2024	-	Identical under single numbering
57	IS/IEC/TR 62351-90-3):2021 IEC TR 62351-90-3:2021 IEC TR 62351-90-3:2021	Power systems management and associated information exchange - Part 90 Data and communications security - -Section 3: Guidelines for network and system management		-	Identical under single numbering
58	IS/IEC/TS 62351-100-1:2018 IEC TS 62351-100-1:2 Reviewed In : 2024 IEC TS 62351-100-1:2018	Power systems management and associated information exchange Data and communications security Part 100-1: Conformance test cases for IEC TS 62351-5 and IEC TS 60870-5-7	August, 2024	-	Identical under single numbering
59	IS/IEC/TS 62351-100-3:2020 IEC TS 62351-100-3:2 Reviewed In : 2024 IEC TS 62351-100-3:2020	Power systems management and associated information exchange Data and communications security Part 100-3: Conformance test cases for IEC 62351-3 the secure communication extension for profiles including TCPIP	August, 2024	-	Identical under single numbering
60	IS/IEC/TS 62351-100-6):2022 IEC TS 62351-100-6:2022 IEC TS 62351-100-6:2022	Power systems management and associated information exchange - Part 100: Data and communication security Section 6: Cybersecurity conformance testing for IEC 61850-8-1 and IEC 61850-9-2		-	Identical under single numbering
61	IS/IEC 62488-1:2012 IEC 62488-1: 2012 IEC 62488-1: 2012	Power line communication systems for power utility applications Part 1: Planning of analogue and digital power line carrier systems operating over EHVHVMV electricity grids		-	Identical under single numbering
62	IS/IEC 62488-2:2017 IEC 62488-2: 2017	Power line communication systems for power utility applications Part 2: Analogue power line carrier		-	Identical under single numbering

	IEC 62488-2: 2017	terminals or APLC			
63	IS/IEC 62488-3:2021 IEC 62488-3:2021 IEC 62488-3:2021	Power line communication systems for power utility applications Part 3: Digital Power Line Carrier DPLC Terminals and hybrid ADPLC Terminals		-	Identical under single numbering
64	IS/IEC 62746-10-1:2018 IEC 62746-10-1:2018 Reviewed In : 2024 IEC 62746-10-1:2018	Systems Interface between customer energy management and the power management system - Part 10-1: Open Automated Demand Response	December, 2024	-	Identical under single numbering
65	IS 8792:2023 IEC 60353:1989 IEC 60353:1989	Line Traps for AC Power Systems Second Revision		-	Identical under dual numbering
66	IS 8997:2022 IEC 60481:1974	COUPLING DEVICES FOR PLC SYSTEMS		-	Modified/Technically Equivalent
67	IS 8998:2023 IEC 60481:1974	Coupling Devices for PLC Systems i½ Methods of Tests (First Revision)		-	Modified/Technically Equivalent
68	IS 9859 (Part 1):2023	Code of Practice for Installation and Maintenance of Outdoor Power Line Carrier Equipment Part 1 Line Traps		-	Indigenous
69	IS 9859 (Part 2):2023	Installation and Maintenance of Outdoor Power Line Carrier Equipment i½ Code of Practice Part 2 Coupling Devices (First Revision)		-	Indigenous
70	IS 9859 (Part 3):2023	Installation and Maintenance of Outdoor Power Line Carrier Equipment i½ Code of Practice Part 3 Coupling Capacitors/Capacitor Voltage Transformers (First Revision)		-	Indigenous

Standards under Development

Projects Approved		
Sl. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards		
Sl. No.	Doc No.	Title
No Records Found		

Drafts Standards in WC Stage		
Sl. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage		
Sl. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standard

Sl. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print

Sl. No.	Doc No.	Title
1	LITD 10 (24782) Revision of: IS 16335:2015	Power Control Systems Security Requirements First Revision

Total Published Standards:66 Total Standards Under development:1

Aspect Wise Report

Product : 0
 Code of Practices : 60
 Methods of Test : 3
 Terminology : 4
 Dimensions : 0
 System Standard : 0
 Safety Standard : 0
 Others : 2
 Service Specification : 0
 Process Specification : 0
 Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

Sl. No.	IS No. & Year	Title
1	IS 10706:1983 Reviewed In : 2020	Methods of tests for single sideband PLC terminals
2	IS 13241 (Part 1):1991 Reviewed In : 2021	Installation and Maintenance of Indoor PLC Equipment - Code of Practice Part 1 PLC Terminals
3	IS 13968 (Part 1/Sec 15):1994 Reviewed In : 2020	Performance and testing of teleprotection equipment of power systems Part 1 narrow band command systems
4	IS 3700 (Part 1):1972 Reviewed In : 1999	Essential Ratings and Characteristics of Semiconductor Devices - Part 1 General
5	IS 3700 (Part 2):1972 Reviewed In : 1999	Essential ratings and characteristics of semiconductor devices Part 2 Low power signal diodes
6	IS 3700 (Part 3):1973 Reviewed In : 1998	Essential ratings and characteristics of semiconductor devices Part 3 Rectifier diodes
7	IS 3700 (Part 4):1968 Reviewed In : 2002	Essential ratings and characteristics of semiconductor devices Part 4 Low power small signal transistors
8	IS 3700 (Part 5):1968 Reviewed In : 1998	Essential Ratings and Characteristics of Semiconductor Devices - Part V Power Transistor
9	IS 3700 (Part 6):1968 Reviewed In : 1998	Essential ratings and characteristics of semiconductor devices Part 6 Switching transistors
10	IS 3700 (Part 8):1970 Reviewed In : 1999	Essential Ratings and Characteristics of Semiconductor Devices - Part VIII Voltage Regulator and Voltage Reference Diodes
11	IS 3700 (Part 9):1972 Reviewed In : 2002	Essential ratings and characteristics of semiconductor devices Part 9 Variable capacitance diodes
12	IS 3700 (Part 10):1982 Reviewed In : 1999	Essential Ratings and Characteristics of Semiconductor Devices - Part X Field-Effect Transistors
13	IS 3700 (Part 11):1984 Reviewed In : 2002	Essential Ratings and Characteristics of Semiconductor Devices - Part 11 Light Emitting Diodes
		Letter symbols for semiconductor devices Part 1 General aspects

14	IS 3715 (Part 1):1971 Reviewed In : 2002	
15	IS 3715 (Part 2):1971 Reviewed In : 2002	Letter symbols for semiconductor devices Part 2 Diodes
16	IS 3715 (Part 3):1971 Reviewed In : 2002	Letter Symbols for Semiconductor Devices - Part III Transistors
17	IS 4400 (Part 1):1967 Reviewed In : 1999	Methods Of Measurements On Semiconductor Devices Part 1 General
18	IS 4400 (Part 2):1967 Reviewed In : 1999	Methods of measurements on semiconductor devices Part 2 Low power signal diodes
19	IS 4400 (Part 3):1968 Reviewed In : 1999	Methods of Measurements on Semiconductor Devices - Part III Rectifier Diodes
20	IS 4400 (Part 4):1981 Reviewed In : 1999	Methods of measurements on semiconductor devices Part 4 Transistors
21	IS 4400 (Part 8):1970 Reviewed In : 1999	Methods of measurements on semiconductor devices Part 8 Voltage regulator and voltage reference diodes
22	IS 4400 (Part 9/Sec 1):1974 Reviewed In : 2002	Methods of measurements on semiconductor devices Part 9 Variables capacitance diodes Sec 1 For operating frequencies below 300 MHz
23	IS 4400 (Part 9/Sec 2):1974 Reviewed In : 2002	Methods of Measurements on Semiconductor Devices - Part IX Variable Capacitance Diodes - Section 2 For Operation at Frequencies Above 6 GHz
24	IS 4400 (Part 10):1983 Reviewed In : 2002	Methods of measurements on semiconductor devices Part 10 Field effect transistors
25	IS 5000 (Part 1):1969	Dimensions of semiconductor devices Base outline OB 1
26	IS 5000 (Part 1):1969	Dimensions of semiconductor devices Case outline OC 1
27	IS 5000 (Part 2):1969 Reviewed In : 2002	Dimensions of semiconductor devices Base outline OB 2
28	IS 5000 (Part 2):1969 Reviewed In : 1983	Dimensions of semiconductor devices Case outline OC 2
29	IS 5000 (Part 2):1969	Dimensions of semiconductor devices Devices outline OD 2
30	IS 5000 (Part 3):1969 Reviewed In : 1978	Dimensions of semiconductor devices Base outline OB 3
31	IS 5000 (Part 3):1969	Dimensions of semiconductor devices Case outline OC 03
32	IS 5000 (Part 3):1969 Reviewed In : 1978	Dimensions of semiconductor devices Devices outline OD 3
33	IS 5000 (Part 4):1969	Dimensions of semiconductor devices Base outline OB 4
34	IS 5000 (Part 4):1969	Dimensions of semiconductor devices Case outline OC 4
35	IS 5000 (Part 5):1969	Dimensions of semiconductor devices Base outline OB 5
36	IS 5000 (Part 5):1969	Dimensions of semiconductor devices Case outline OC 5
37	IS 5000 (Part 6):1969	Dimensions of semiconductor devices Base outline OB 6
38	IS 5000 (Part 7):1969	Dimensions of semiconductor devices Base outline OB 7
39	IS 5000 (Part 22):1978	Dimensions of semiconductor devices Device outline OD 22
40	IS 5000 (Part 24):1979	Dimensions of semiconductor devices Device outline OD 24
41	IS 5000 (Part 30):1981	Dimensions of semiconductor devices Device outline OD 30
42	IS/IEC/TS 62351-3:2014 IEC 62351-3 : 2014 Reviewed In : 2019 IEC	Power Systems Management and Associated Information Exchange Data and Communications Security Part 3 Communication Network and System Security Profiles Including TCP IP First Revision

	62351-3 : 2014	
43	IS 7441 (Part 1):1974 Reviewed In : 1988	Essential Ratings and Characteristics of Digital Integrated Circuits - Part I General Format
44	IS 8793:1995 Reviewed In : 2023 IEC 60353	Line traps for ac power systems methods of tests First Revision
45	IS 9482:1996 Reviewed In : 2020 IEC 60495	Single sideband power line carrier terminals - Specificaiton First Revision
46	IS 9528 (Part 1):1980 Reviewed In : 2020	Manual for planning of SSB PLC systems Part 1 PLC systems
47	IS 9528 (Part 2):1980 Reviewed In : 2020	Manual for Planning of SSB PLC Systems Part 2 PLC Systems Planning

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