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The Authoritative Dictionary of
IEEE Standards Terms

Seventh Edition



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PSDN *See*: packet-switched data network.

pseudo code (1) (software) A combination of programming language constructs and natural language used to express a computer program design. For example: IF the data arrives faster than expected, THEN reject every third input. ELSE process all data received. ENDIF. (C) 610.12-1990

(2) **(test, measurement, and diagnostic equipment)** An arbitrary code, independent of the hardware of a computer, which has the same general form as actual computer code but which must be translated into actual computer code if it is to direct the computer. (MIL) [2]

(3) A combination of programming language constructs and natural language used to express a computer program design. For example:

IF the data arrives faster than expected

THEN reject every third input

ELSE process all data received

ENDIF

(C) 610.13-1993w

pseudo-coning (inertial sensors) (strapdown inertial system)

A system error created when the system computer attempts to cancel a steady coning input term which in actuality does not exist. Because of certain coupling errors in the gyro, a rate input about only one axis can produce outputs on both axes of the gyro. If the coupling error, for example, is angular acceleration sensitivity, the two outputs produced will have the same form as if a true coning motion was applied to the gyro. (AES/GYAC) 528-1984s

pseudo-instruction (1) (test, measurement, and diagnostic equipment) An instruction which resembles the instructions acceptable to the computer but which must be translated into actual computer instructions in order to control the computer. (MIL) [2]

(2) **(software)** A source language instruction that provides information or direction to the assembler or compiler and is not translated into a target language instruction. For example, an instruction specifying the desired format of source code listings. *Synonyms*: pseudo operation; pragma; pseudo-op. (C) 610.12-1990

pseudolatitude (navigation aid terms) A latitude in a coordinate system which has been arbitrarily displaced from the earth's conventional latitude system so as to move the meridian convergence zone (polar region) away from the place of intended operation. (AES/GCS) 172-1983w

pseudolongitude (navigation aid terms) A longitude in a coordinate system which has been arbitrarily displaced from the earth's conventional longitude system so as to move the meridian convergence zone (polar region) away from the place of intended operation. (AES/GCS) 172-1983w

pseudonoise sequence (communication satellite) A binary sequence with a very desirable transorthogonal auto-correlation property. In space communications commonly used for synchronization and ranging. *Syn*: PN sequence. (COM) [19]

pseudo-op *See*: pseudo-instruction.

pseudo operation *See*: pseudo-instruction.

pseudo-random Pertaining to the approximation of true, statistical randomness. (C) 1084-1986w

pseudo-random number Any member of a sequence of numbers sufficiently close to a random number sequence to permit its use in calculations formally requiring random numbers. (C) 1084-1986w

pseudo-random number sequence (1) A sequence of numbers, determined by some defined arithmetic process, that is satisfactorily random for a given purpose, such as by satisfying one or more of the standard statistical tests for randomness. Such a sequence may approximate any one of several statistical distributions, such as uniform distribution or normal Gaussian distribution. (C/C) [20], [85]

(2) **(mathematics of computing)** A sequence of numbers, determined by some defined arithmetic process, that is suffi-

ciently close to a random number sequence to permit its use in calculations formally requiring a random number sequence. (C) 1084-1986w

pseudo-random test signal A signal consisting of a bit sequence that approximates a random signal. (COM/TA) 1007-1991r

pseudo signal A signal other than that at the interface between the device and the tester. This includes internal signals, derived signals, and any other signals that may be required by tools other than test translators to generate tests or test constructs. (C/TT) 1450-1999

pseudoternary coding A means of digital signaling in which three signal levels are used to encode binary data. (C) 610.10-1994w

PSF *See*: product specification file.

PSK *See*: phase-shift keying.

PSN *See*: public switched network; private switching network.

PSPDN *See*: packet switched public data network.

PSS *See*: physical source statements.

PSTN *See*: public switched telephone network.

PSW *See*: program status word.

psychometric chroma (illuminating engineering) A correlate of perceived chroma defined in terms of CIELUV or CIELAB. Equal scale intervals correspond approximately to equal differences in perceived chroma. (EEC/IE) [126]

psychometric hue-angle (illuminating engineering) A correlate of hue defined in terms of CIELUV or CIELAB. (EEC/IE) [126]

psychometric lightness (illuminating engineering) A correlate of lightness defined in terms of CIELUV or CIELAB. Equal scale intervals correspond approximately to equal differences in (perceived) lightness. (EEC/IE) [126]

psychometric saturation (illuminating engineering) A correlate of saturation defined in terms of CIELUV. Equal scale intervals correspond approximately to equal differences of (perceived) saturation. *Note*: Psychometric saturation cannot be calculated in terms of CIELAB. (EEC/IE) [126]

psychophysics Study of correlations between stimulus parameters and detection or perception of stimuli. (T&D/PE) 539-1990

PTE *See*: Port Transfer Error.

PTM *See*: pulse-time modulation.

PTT *See*: postal telephone and telegraph.

PTYPE *See*: protocol type.

p-type crystal rectifier A crystal rectifier in which forward current flows when the semiconductor is positive with respect to the metal. *See also*: rectifier. (EEC/PE) [119]

p-type semiconductor *See*: semiconductor, *p*-type.

public (1) A design feature, documented in the component data sheet, that may be used by purchasers of the component. (TT/C) 1149.1-1990

(2) A responsibility that is not hidden, i.e., visible to any requester (available to all without restriction). *Contrast*: private; protected. (C/SE) 1320.2-1998

Publication Contents The publisher-defined contents of a publication. (IM/ST) 1451.1-1999

Publication Domain A Domain for a specific publication. *See also*: Domain. (IM/ST) 1451.1-1999

Publication Key A publisher-defined identifier specifying the form and contents of a publication in a publish-subscribe communication. (IM/ST) 1451.1-1999

Publication Topic A configurable identifier for the name of a publication in a publish-subscribe communication. Specifically a value having datatype `PublicationTopic`. For a Publisher port, the operation `GetPublicationTopic` returns a value, `publication.topic`, that has the same value as `PublicationTopic`. (IM/ST) 1451.1-1999

public-address system A system designed to pick up and amplify sounds for an assembly of people. (EEC/PE) 1110

public circuit-switched circuit-switching techn

public data network A communications communications for the square rate data transmission; *also*: public switched work; public circuit-sw

public data transmission public key system An e of a public encryption provide message security signatures.

public object The representation of a particular language bit (C/PA) 13

public OM object The representation in a particular program (C/PA) 1327.2-1

public packet switching uses packet switching

public page A memory or application. No access page.

public specifications Sp restriction, to anyone distribution (i.e., sale)

public switched network icated communications:

public switched telephone network in which communication is required and that is supported by more telecommunication telephone service that

(2) Commonly called t

(3) A network of a communication telephones, lines and public telecommunication systems) A telecommunication public.

public telephone network *See also*: public s

public telephone station use by the public, generally deposited in a coin collection *also*: telephone station

Public Transducer A Public interface or transducers supported

Publisher object Any object network via an `C` `PublisherPort` or a:

Publisher Port An interface `PublisherPort` or of

publish-subscribe communication where one or more of information on a specific topic interested in that topic objects knowing the identifier 1451.1 system, the `PublicationTopic`, `PublicationKey` location.

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Fifth Edition

Rufus P. Turner
Stan Gibilisco



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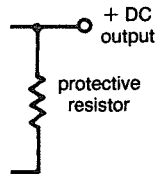
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protector 1. A fast-acting power-disconnect device, such as a circuit breaker or fuse, that acts to protect electronic equipment. 2. A device or connection, such as a safety ground or ground-fault interrupter which acts to protect an operator from electric shock. 3. Contact protector.

protium The light isotope of hydrogen, having an atomic mass of 1.

proto-actinium See PROTACTINIUM.

protocol The method by which a procedure is followed; a uniform set of governing regulations. The protocol ensures proper operation of a system or network.

proton A positively charged particle in the nucleus of an atom. The proton is approximately 1840 times heavier than the electron.

proton rest mass Symbol, m_p . The mass of a proton at rest; it is a constant equal to 1.6726×10^{-27} kg. Compare ELECTRON REST MASS.

proton-synchrotron A synchrotron in which frequency modulation of the RF accelerating voltage accelerates protons to energies of several billion electronvolts.

prototype The preliminary design or model of a device or system.

proustite Crystalline silver arsenide trisulfide. Artificial crystals of this compound are used in tunable infrared-ray instruments.

proximity alarm A capacitance relay employed to actuate an alerting-signal device when an area is intruded upon or a person is too close to a protected object. Also called INTRUSION ALARM.

proximity detector A device that indicates the presence of a body close to it. Such a device employs some form of circuit, such as that of a capacitance relay, which changes its operating characteristics when an object enters its field.

proximity effect The influence of high-frequency current flowing in one conductor upon the distribution of current flowing in an adjacent conductor.

proximity fuse An electronic device situated in the nose of a missile or other projectile. When the missile is near the target, the fuse transmits a signal which is reflected back from the target and detonates the missile.

proximity relay See CAPACITANCE RELAY.

proximity switch See CAPACITANCE RELAY.

PRR Abbreviation of PULSE REPETITION RATE.

PRV Abbreviation of PEAK REVERSE VOLTAGE.

PS Abbreviation of POWER SUPPLY.

ps Abbreviation of PICOSECOND.

PSD Abbreviation of PHASE-SENSITIVE DETECTOR.

psec Abbreviation of PICOSECOND. (Also, ps.)

pseudo-Brewster angle Symbol, ψ_B . In the progression of radio waves, the angle at which the reflection coefficient passes through a medium with vertically polarized waves. It is so called because it corresponds to the Brewster angle in optics. See also BREWSTER ANGLE.

pseudocode In a computer system, an instruction or code symbol that affects the operation of the programming in an indirect manner.

pseudo-instruction In computer programming practice, data representing an instruction and requiring transla-

tion by a compiler or assembler.

pseudo-offlining During input/output operations in a computer system, maximizing hardware by disconnecting devices that are slow from the process in question.

pseudo-operation In computer practice, an operation that, rather than being performed by hardware, is carried out by special software or by macroinstruction.

pseudo-random numbers Numbers that, although produced by a computer operating on an algorithm for their generation, are useful for an application requiring random numbers; truly random numbers are seldom produced by a methodology devised for their generation.

pseudoscopy Image inversion, as in the real image of a hologram.

pseudo-stereophonic effect A somewhat heightened binaural effect obtained when two loudspeakers are situated, relative to the listener, so that a transit-time difference of 1 to 30 milliseconds results.

psf Abbreviation of *pounds per square foot*. (Also, lb per sq ft, lb/ft² and lb•ft⁻²).

psi 1. Abbreviation of *pounds per square inch*. (Also, lb per sq in. and lb/in.²). 2. The 23rd letter (ψ) of the Greek alphabet. It is one symbol for phase difference and is used to designate angles, electric flux of induction, and total flux of electric displacement.

psia Abbreviation of *pounds per square inch absolute*.

psig Abbreviation of *pounds per square inch gauge*.

psi particle A massive elementary particle representing a resonance in an electron-positron interaction.

PSK Abbreviation of PHASE-SHIFT KEYING.

PSM Abbreviation of *pulse-spacing modulation* (see PULSE-INTERVAL MODULATION).

psophometer A device used to measure noise in a wire communications system. Gives quantitative readings based on typical human observations.

psvm Abbreviation of *phase-sensitive voltmeter*.

PSWR Abbreviation of *power standing-wave ratio*.

psychoacoustics A field of acoustics that involves the effects of various sounds on listeners.

PT Abbreviation of *pacific time*.

Pt Symbol for PLATINUM.

PTC Abbreviation of POSITIVE TEMPERATURE COEFFICIENT.

PtIr Symbol for PLATINIRIDIUM.

PTM Abbreviation of PULSE-TIME MODULATION.

PTO Abbreviation of PERMEABILITY-TUNED OSCILLATOR.

PTP Abbreviation of PAPER TAPE PUNCH.

PTT Abbreviation for *press to talk*.

PTV Abbreviation of *public television*.

p-type conduction In a semiconductor, current flow consisting of the movement of holes. Compare N-TYPE CONDUCTION.

p-type material Semiconductor material that has been doped with an acceptor-type impurity and, consequently, conducts current via hole migration. Germanium, for example, when doped with indium, becomes p-type. Compare N-TYPE MATERIAL.

p-type semiconductor An acceptor-type semiconductor, i.e., one containing an excess of holes in its crystal lattice.