

The basic power source of a communication system is

Article Overview

The basic power source of a communication system is a DC (direct current) power supply.

In a communication system, components such as transmitters, receivers, amplifiers, and transducers require electrical energy to operate effectively . The DC power source provides the necessary energy to amplify signals, process information, and maintain the functionality of electronic circuits throughout the system. For example, amplifiers boost the strength of modulated signals to compensate for attenuation during transmission, and this amplification relies on energy supplied by the DC source .

Role of Power in Communication Systems

- Transmitters: Convert information from the source into signals suitable for transmission. They require a stable power supply to modulate and transmit signals over the communication channel .
- Amplifiers: Increase the amplitude of signals to ensure they can travel long distances without significant loss. The energy for amplification comes from the DC power source .
- Receivers: Extract and demodulate the transmitted signal to recover the original message. Receivers also rely on DC power to operate amplifiers, detectors, and other electronic components .
- Transducers: Convert one form of energy into another (e.g., sound to electrical signals) and require electrical power to function properly

Article Content

Nov 26, 2025

What Are the Key Components of a Communication System?

Introduction Communication systems are the backbone of modern society, enabling us to exchange information

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Elements of Communication System

Communication system is made up of several elements. Each component plays a specific role in transmitting

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Communication System: Its components, working, types, terminology

Science > Physics > Communication > Communication System Communication is the process of exchange of

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(PDF) Introduction to Communication Systems

Communication system is a system model describes a communication exchanges between two stations, transmitter

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Communication Systems: Fundamentals & Types Explained

Learn the basics of communication systems, key types, and real-world applications. Ideal for students seeking clear, simple answers.

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Communication Systems

What Are Communication Systems? Communication systems are engineered combinations of hardware, software, and protocols

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Communication System Block Diagram, Elements, Types, Examples

The main objective of a communication system is to collect messages or information from the sender and to deliver

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Principles of Communication Systems | Basic Block Diagram

Before investigating individual systems, we have to define and discuss important terms such as information, message and signal,

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Elements of a communication system and their different aspects

There are three critical components to every communication system. The transmitter, the channel, and the receiver. The block

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Basic Elements of a Communication System

Communication is the act of sending, processing, and receiving information via electronic means. Let us find out more about the

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Basic Communication System | Block Diagram, Types, Processes

Basic Communication System Because of noise and attenuation, the basic communication system consists of

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Block Diagram of Communication System

The document describes the basic components of a communication system: 1) An information source produces a message that is

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Communication System: Basic Elements and Its Applications

A VCCS or Voice Communication Control System is basically an automatic call distributor with characteristics that make to utilize in

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Components of a Communication System

In this lesson, learn about the various components of a communication system. Explore how they function together using an example

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Chapter 1: Elements of a Communication System | GlobalSpec

Figure 1.1: Block diagram of a communication system. We have emphasized the major elements of the system as the transmitter,

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PowerPoint Presentation

16 Internal Noise: is the fundamental noise that gets generated by the electronic equipment involved in the system itself, due to

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Overview of Communication Systems | part of Communication

This chapter provides a panoramic view of communication systems. It is intended to give a lucid and comprehensive introduction to

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Electric Power Sources

Electric power sources supply energy to electric systems by moving the electrons in a circuit and thereby

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Fundamentals of Communication Systems

Summary General presentation of the communication systems is given, including their classification, basic functions, performance

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Introduction of Communication System

Different communication equipment including transmitter, receiver and communication channel assembled that form a

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Elements Of Communication System

A communication system is the backbone of modern society, enabling the transfer of information from one point to

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Communication System – Block Diagram, Types, Elements

Block Diagram of Communication System The essential components of a communication system are the information source input

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1.3: Structure of Communication Systems

Figure 1.3.1 The Fundamental Model of Communication. The fundamental model of communications is portrayed in Figure 1.3.1. In

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ELEMENTS OF A DIGITAL COMMUNICATION SYSTEM

FIGURE 1.1-1 Basic elements of a digital communication system. The source output may be either an analog signal, such as an

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Basic Communication System | Block Diagram, Types, Processes

A communication system's goal is to convey intelligence signals from a source to a destination located at a distance

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Principles of Communication Systems | Basic Block Diagram

To correlate these concepts, a basic block diagram of communication system is shown in Figure 1-1. The Principles of

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What Are the Key Components of a Communication System?

At the heart of any communication system is the transmitter. This component is responsible for taking the original

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Elements of Communication System: Types, Components

What are the essential elements of a communication system? Ans: The basic components of a communication system

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Block Diagram of Communication Systems The block diagram given below represents the flow of the signal from the source to the

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Communication Systems Engineering: Complete Guide to Design

Communication Systems form the backbone of modern technology, enabling the transfer of information from source to destination

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Elements Of Communication System

Learn more about Elements Of Communication System in detail with notes, formulas, properties, uses of Elements Of

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Basic Communication System Block Diagram

What are the essential components of a communication system, and what functions do they perform? A communication system

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Introduction to Communication Systems Communication System

Communication is the process of exchanging information. The basic components of a communication system are:

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Chapter-1: Introduction MODEL OF A COMMUNICATION SYSTEM

Chapter-1: Introduction The purpose of a Communication System is to transport an information bearing signal from a source to a user

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JEE 2022: Physics

Introduction, the definition of communication system, example of communication system, types of communication system, analog

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Electrical Power System: What is it? (Power System Basics)

A SIMPLE explanation of an Electrical Power System. Learn what a Power System is, and the basics of Electrical

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Communications system

Power-line communication systems operate by impressing a modulated carrier signal on power wires. Different types of power-line

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Basic Elements used in Communication System process

The communication system consist of information transmission from one point to another such that original information

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Core Components of Communication Systems

Any communication system has three basic elements - a transmitter that converts a message signal into a form suitable for

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