

Antenna Azimuth Position Control System Solution

If you ally compulsion such a referred **antenna azimuth position control system solution** books that will have enough money you worth, get the enormously best seller from us currently from several preferred authors. If you want to funny books, lots of novels, tale, jokes, and more fictions collections are plus launched, from best seller to one of the most current released.

You may not be perplexed to enjoy every book collections antenna azimuth position control system solution that we will no question offer. It is not vis--vis the costs. It's practically what you obsession currently. This antenna azimuth position control system solution, as one of the most functioning sellers here will enormously be along with the best options to review.

Open Library is a free Kindle book downloading and lending service that has well over 1 million eBook titles available. They seem to specialize in classic literature and you can search by keyword or browse by subjects, authors, and genre.

Antenna Azimuth Position Control System

antenna azimuth position control system. Replacing the power amplifier gain with unity and letting the pre-amplifier gain K equal to 1000, we find $G(s)$ and closed loop transfer function $T(s)$ as: $G(s) = 66.3/s(s+1.71)$ and $T(s) = 66.3/s^2 + 1.71s + 66.3$ From above equation of $T(s)$ we get $n = 8.14$ and damping ratio = 0.105.

Antenna Azimuth Position Control System | Control Theory ...

The issue of antenna azimuth position control has become one of the many aspects that have drawn the attention of researchers in the control of antenna placement. These interests are due to the...

(PDF) Antenna Azimuth Position Control System using PID ...

International Journal of Electrical and Computer Engineering Nowadays the antenna azimuth position control system is used in many advance applications like robots, computer disks and so on.

Antenna Azimuth Position Control System Using PID ...

The antenna azimuth position control system turns the input command in output position. This system is widely used in antennas, robots and computers disks. In this paper we present the systems that are managed with azimuth antenna. We're going to show how the system works and how its performance can be improved.

Modeling and Simulation of Antenna Azimuth Position ...

Antenna Azimuth Position Control System Analysis and Controller Implementation Approvals

(PDF) Antenna Azimuth Position Control System Analysis and ...

The goal of this study is to ensure the minimum angle deviation after the antenna is rotated. For this purpose, the antenna position control system is designed in MATLAB/Simulink and PID, fuzzy...

(PDF) Antenna azimuth position control with PID, fuzzy ...

As expressed in previous section, an antenna azimuth position control system consists of two potentiometers which first one is used as input and the second one is used as a feedback, a preamplifier, a power amplifier, an armature controlled dc motor and a load which is antenna.

Antenna Azimuth Position Control with Fuzzy Logic and Self ...

The antenna azimuth control system currently available on the market is described as a servo controlled antenna through the use of gears and feedback potentiometers. The current design lacks any sort of compensator controller that would provide stability control. Our team must analyze the current configuration and determine the stability.

Antenna Azimuth Controller Design

The layout of an antenna azimuth position control system is shown in Figure 1 Layout Potentiometer Antenna 0;(1) Desired azimuth angle input (1) Azimuth angle output Differential amplifier and power amplifier Motor Potentiometer Figure 1: This system has a Schematic diagram as shown in Figure 2 The Schematic Parameters are listed in the Figure 3 (only use Configuration 1 and disregard the ...

The Layout Of An Antenna Azimuth Position Control ...

A position control system converts a position input command to a position output response. Position control finds widespread applications in antennas, robot arms, and computer disk drives. The radio telescope antenna in Fig. 1 is one example. The purpose of this system is to have the azimuth angle output follow the input angle.

Antenna Azimuth Controller Design | Control Theory ...

Nowadays the antenna azimuth position control system is used in many advance applications like robots, computer disks and so on. Modeling, simulation and control of this antenna is implemented in this paper. Firstly, the modeling of the system is done in frequency range (with transfer function) and PID controller is used to control the system as well as, Ziegler-Nichols is used to tune the PID parameter gains.

Figure 4 from Antenna Azimuth Position Control System ...

Given the block diagram of the antenna azimuth position control system, specify a discrete compensator $G_C(z)$ such that the closed loop system approximately meets the following: (1) 4% overshoot to a unit step input, (2) a settling time of 5 seconds, and (3) a steady state error of 1% to a unit ramp input.

Satellite Tracking Controls Modelling

An antenna azimuth position control system is shown in Figure 1.9(a), with a more detailed layout and schematic in Figures 1.9(b) and 1.9(c), respectively. Figure 1.9(d) shows a functional block diagram of the system. The functions are shown above the blocks, and the required hardware is indicated inside the blocks.

An antenna azimuth position control system is shown in ...

C. Figure Q4 (c) - (d) shows the frequency response of antenna azimuth position control system represented by a transfer function $K G (S) = (s+5) (s+20) (s+50)$ and in the form of unity feedback. -60 -80 -100 -120 20 log M -140 -160 -180 100 1000 10 Frequency (rad/s) Figure Q4 (c) - Bode log-magnitude 0 -50 -100 - 150 Phase) -200 -250 -300 1 100 1000 10 Frequency (rad/s) Figure Q4 (d) - Bode log-phase Based on the Bode plot of Figure Q4 (c) - (d), answer the followings: i.

C. Figure Q4 (c) - (d) Shows The Frequency Respons ...

The EMM-Natal project includes an Antenna Control System. This system is responsible for the control of the antenna for satellite tracking. Section 2 below presents its physical structure and control system. Section 3 describes the software, developed in GNU/Linux platform. Results are presented in section 4.

CONTROL SYSTEM FOR SATELLITE TRACKING ANTENNA - ScienceDirect

The system was tested to move at an elevation angle of 45 degrees and 90 degrees in the azimuth axis and programmed to return to its original position.

Antenna Positioning System Test

Two major control loops of the antenna control system are the position loop and rate loop. The position loop drives the antenna based on a desired angle command. Figure 1 is a functional block diagram of a typical position control loop. A major component of the position loop is the rate loop.

Antenna Servo Control System Characterization: Rate Loop ...

An antenna positioner control system and related method is disclosed. The antenna positioner control system includes a housing and a hub mounted within a housing. A support plate is rotatably...

US6195060B1 - Antenna positioner control system - Google ...

The varying duty cycles result in a controllable torque across the antenna motors and consequently, a speed control system. For the different binary states of the DAC input to the parallel port bits, the speed of rotation of the antenna along the azimuth axis was measured in revolutions per minute (rpm).

Copyright code: d41d8cd98f00b204e9800998ecf8427e.