Wojskowy Instytut Łączności - Państwowy Instytut Badawczy

https://www.wil.waw.pl/wil/publikacje/baza-publikacji/r237272,Voltage-Standing-Wave-Ratio-as-an-Important-Parameter-for-Resilient-Communicatio.html
2022-10-05, 02:16

Voltage Standing Wave Ratio as an Important Parameter for Resilient Communication

Tytuł
Voltage Standing Wave Ratio as an Important Parameter for Resilient Communication

Typ publikacji
Referat konferencyjny

Rok
2021

Data dokładna
2021

Autorzy słownie

Autorzy
Firlej Andrzej Musiał Sławomir

ISBN/ISSN
ISBN: 978-0-9998551-6-4

Informacje dodatkowe
[Referat Wygłoszony na: 37th IBIMA Conference: 30-31 May 2021, Cordoba, Spain]

Abstract: The following article describes the voltage standing wave ratio VSWR parameter. The parameter is very important for resilient, efficient communication. It explains a physical meaning of VSWR. There is a presentation of mismatch effects and the way of calculating of VSWR.

There are also presented the relationships between the voltage standing wave ratio VSWR and the standing wave ratio SWR. There is given an example of calculation: reflection coefficient, electrical length of the cable, wave velocity in the cable, VSWR and the amount of power from output of the transmitter absorbed by the antenna for given configuration. It is presented developed software to calculate these parameters. There is also explain necessity of impedance matching in microwave circuit. There are also presented the adverse effects of mismatch.

Powiązane publikacje

-

Adres url strony

https://ibima.org/accepted-paper/voltage-standing-wave-ratio-as-an-important-parameter-for-resilient-communication/