1. Record Nr. UNINA9910768197703321 Autore He Guolong Titolo Multibeam Phased Array Antennas as Satellite Constellation Ground Station / / by Guolong He, Xin Gao, Rentian Zhang, Liangliang Sun, Hui Zhou Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9789819979103 9819979102 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (112 pages) Collana Modern Antenna, , 2731-7994 Altri autori (Persone) GaoXin ZhangRentian SunLiangliang ZhouHui Disciplina 621.3 Soggetti **Telecommunication** Wireless communication systems Mobile communication systems Signal processing **Electronics** Microwaves, RF Engineering and Optical Communications Wireless and Mobile Communication Digital and Analog Signal Processing Electronics and Microelectronics, Instrumentation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1 Introduction -- 2 Phased Array Antenna Basics -- 3 Array Excitation Error Analysis -- 4 Array Excitation Error Calibration -- 5 Some Key Design Issues for Satellite Ground Station Application. This book focuses on the multi-beam phased array antenna as a Sommario/riassunto satellite ground station. As there are already many excellent books on phased array antennas in the literature, this book focuses mainly on some engineering practices and fills the gap between principles and

practices, such as array excitation error impact analysis and calibration methods, array geometry design for hemispherical coverage, multiple

beam resource management, etc. This book is particularly suitable for readers interested in satellite constellation design or satellite ground station design. This book also benefits researchers and engineers in the fields of phased array antennas, aerospace engineering, telecommunications, etc.