

V/UHF DIRECTION FINDER SYSTEM

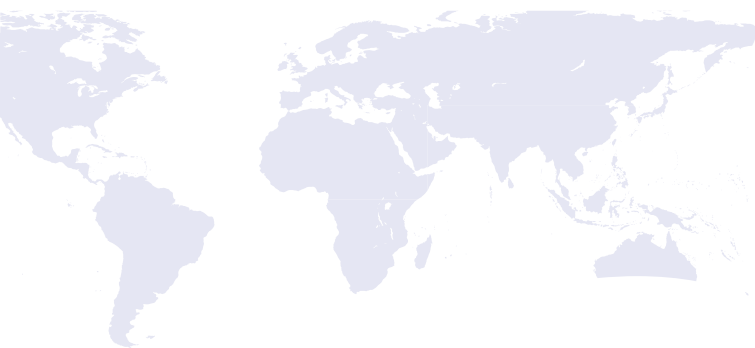
SHFIDF3537F2

Wideband direction finder SHFIDF3537F2 is considered as stationary DF with an installed antenna at the top of a high tower, and it is the main system for frequency monitoring and meticulous direction finding. This system is installed at the highest level of the site, therefore it is armed with an active lightning rod to eradicate the secondary effects of lightning. This system is able to monitor a wide range of frequency as well as finding the direction of all active signals in a real-time computing. This system can manipulate two different antennas SDFAVU2439V2 and SDFAVU2439V1. Antenna SDFAVU2439V1 is comprised of three rings of passive dipole elements with covering 3-20GHz frequency range. Antenna SDFAVU2439V2 is made up of two rings of passive dipole elements. Owing to the lightness and smallness of this antenna, it is exploited for situations in which the transportation and installation of antenna is difficult. The lower antenna ring consists of fine disc loaded dipole antennas with covering frequency range of 20-700 MHz, and the upper antenna ring consists of five dipole antennas with covering frequency range of 700-3000 MHz.



FEATURES

- High direction finding precision owing to the height and the dimension of antenna
- Direction finding of modern communication signals such as burst, frequency hopping, fixed frequency, and spread spectrum
- Direction finding of short-time burst signals
- Optimal search of frequency bandwidth, and automatic direction finding of active carriers
- User friendly interface with capability of exhibiting different figures



Technical Specification

SHFIDF3537F2 is compliant with Recommendation as well as the ITU-R Spectrum Monitoring Handbook, Edition 2011	
Frequency range	20 MHz to 3000 MHz
DF method	Correlative interferometer
Instrument DF accuracy	0.5° RMS
System DF accuracy (in test field) with DAA501 with DAA502	1° RMS 3° RMS
Display	azimuth versus frequency, level versus frequency, polar diagram, histogram, waterfall, real-time IF panoramic display (bandwidth 100 kHz or 1 MHz)
Display resolution	0.1° to 5° (selectable)
DF sensitivity	typ. 0.3 µV/m to 8 µV/m (see specifications for VHF/UHF DF antennas)
Operating modes	FFM (Fixed Frequency Mode), WBM (Wide Band Mode), S (f-SCAN, m-SCAN)
Instantaneous bandwidth	10 MHz (Optional 20 - 80 MHz)
Frequency span in wideband mode	1 MHz/2 MHz/10MHz
Minimum signal duration	0.5 ms
Scan speed with 20 kHz resolution	up to 500 MHz/s
-R Recommendation Compliant	SM.1053, SM.1269, SM.1370, SM.1392, SM.1537-0, SM.1537 1, SM.1598, SM.1600-0, SM.1600-2, SM.854-1, SM854-3
Adjacent channel suppression ≤10 kHz	70 dB (FFM), 60 dB (SCAN)
Modes of demodulation Dynamic range (incl. AGC)	CW, AM, FM, SSB
Dynamic range (incl. AGC)	<120 dB
Linearity Second-order intercept (SOI) Third-order intercept (TOI)	≤70 dBm, typ. 80 dBm ≤30 dBm, typ. 35 dBm

