PLATH I SIGNAL PRODUCTS

INTERCEPTION CONFIDENCE · DIRECTION FINDING ASSURANCE





DFP 2400

Direction-finding receiver

20 MHz - 3000 (6000) MHz

The wideband direction-finding receiver DFP 2400, with its coherent real-time bandwidth of 20 MHz, provides seamless direction-finding of communication signals from 20 to 3000 MHz. Unlike some systems, no blind spots are created by switching the channels, due to its continuous processing of 7 channels. Exceptional characteristics such as a high SFDR, enormous sensitivity and very good IP2/IP3 values, make it possible to detect weak or LPI signals - even when the system is next to strong emitters or in motion. An optional frequency range extension to 6 GHz is available when using PLATH Antennas.

TECHNICAL HIGHLIGHTS

- self-calibrating 7 channel parallel processing
- · coherent bandwidth of 20 MHz
- · processes 20 million channels/s
- scan speed 40 GHz/s
- integrated sub-octave preselection filters
- · SFDR ≥80 dB
- · sensitivity -137 dBm
- short burst detection in automatic mode ≥31.25 µs
- bearing accuracy ≤ 0.5° RMS

CUSTOMER ADVANTAGES

- 7 channel design combined with exceptional processing parameters ensures high resistance to multipath propagation and high sensitivity
- perfectly adapts to different frequency conditions with highest receiver sensitivity through automatic filter selection, processing and online calibration
- outstanding technical parameters enables capture of the shortest burst and LPI signals in automatic mode
- designed for integration into automated COMINT systems

Find out about our other products:

DIRECTION-FINDING RECEIVER MONITORING RECEIVER DIRECTION-FINDING ANTENNA RADIO MONITORING ANTENNA SIGNAL DISTRIBUTION

CONTROL & ANALYSIS SOFTWARE

DFP 2400	
Frequency range	20 MHz – 3000 (6000) MHz
Coherent analogue bandwidth	20 MHz
Coherent digital bandwidth	20 MHz
Number of subbands	1
Preselection	optional
Frequency resolution	500 Hz - 32 kHz
Gain control	AGC, MGC, AGC+M
Scaning speed	40 GHz/s (@8 kHz frequency resolution)
Processing speed	20,000,000 channels/s
Maximum input level	-
Noise figure	typ. 9 dB
Full dynamic range	165 dB
SFDR2 (in-band)/IMFDR	≥80 dB
MDS (minimum detectable signal)	-135 dBm (@1 kHz frequency resolution)
Image frequency rejection	≥95 dB
Intermediate frequency rejection	≥95 dB
IP2	≥ 50 dBm
IP3	≥25 dBm
DF method	correlative interferometer
Number of channels	7
DF data resolution	0.1°
DF accuracy	≤0.5° RMS
Monitoring options	n/a
Number of channels	n/a
Bandwidth of channels	n/a
Audio demodulation	CW, AM, FM, USB, LSB, ISB (provided by WIN DF)
Audio bandwidth	-
Frequency stability internal reference	±10 ⁻⁷
Frequency drift	<±5 x 10 ⁻⁷
Nominal impendance	50 Ω
BITE	@ module level
Standards	DIN EN60950-1 (VDE 0805-1)/EN 61000-6-2:2002 /EN 61000-6-3:2002
Operating temperature	+10° C to +40° C
Storage temperature	-40° C to +70° C
Humidity	≤80% (non-condensing)
Protection class	IP 20
Power consumption	24 V DC/230 V AC 400W/650 VA
Network interface	LAN 1000 Base-T (TCP/IP)
Weight	43 kg