

SparkWave GA

DRL 38GA

Low and Medium Capacity
Digital Radio-Relay System



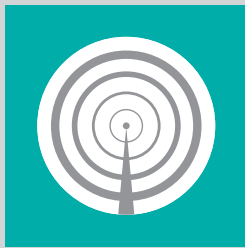
SparkWave DRL 38GA provides a cost-effective solution for transmission of TDM and/or packet signals, capacity from 2xE1 to 17xE1.

Meant for short distances.

It is ideal solution for customers who needs reliable microwave connection, that are easy to install and simple to maintain.

SPARKWAVE
digital microwave radio





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The advantages of the system are quick connection set-up, high operational reliability and spectrum efficiency.

The system is especially convenient for short-haul metropolitan links. Typical path length is 1 to 6 km. It presents an ideal solution for connections of the second and the third generation of mobile telephony base stations, connection of dislocated business centres, connection of Ethernet networks, and for access networks.

Technical data

Frequency plan	Frequency bands Transmit/receive spacing Channel spacing Channel plan Min. frequency setting step	37.0-39.5 GHz 1260 MHz 3.5/7/14/28 MHz ITU-R F.749-2, CEPT/ERC 12-01E12-07 0,25 MHz
System specifications	Transmission capacity System value for BER = 10 ⁻³ -2x2 Mbit/s -8, 4x2 Mbit/s -34, 16x2 Mbit/s Frequency stability Modulation/Demodulation MTBF for 1+0 terminal	2x2, 8, 4x2, 34 and 16x2 Mbit/s 4x Ethernet 10/100 Mbit/s 2 Mbit/s wayside traffic at 34, 16x2 Mbit/s and 4x Ethernet 106 dB 103 dB 97 dB < ±15 ppm QAM/coherent < 170.000 hours
Electrical specifications - transmitter	RF output power RF output power setting	17 dBm 2-17 dBm in 1dB steps
Electrical specification - receiver	Receiver threshold level: BER -2x2 Mbit/s -8, 4x2 Mbit/s -34, 16x2 Mbit/s	10 ⁻³ 10 ⁻⁶ -89 dBm -86 dBm -86 dBm -83 dBm -80 dBm -77 dBm
Electrical specification - baseband	Code Input/output interface parameters	HDB3 according to ITU-T G. 703
Electrical specification - service channel	Voice service channel Data service channel	2-wire, 600 , 300-3400 Hz, A/D-D/A, 64 kbit/s PCM 9,6 kbit/s, V.11 + 9,6 kbit/s, V.28 512 kbit/s +2 Mbit/s
Electrical specification - auxiliary 2Mbit/s	Code Input/output interface parameters	HDB3 according to ITU-T G. 703
Other specifications	Type of antenna waveguide flange Connector type for the connecting cable Maximum attenuation of the connecting cable Power supply voltage Consumption (16x2 Mbit/s, 1+0) Weight - System subrack with 5 units/system module - RF module without antenna RF subrack for 1+1 configuration Dimensions in mm (height x width x depth) - System subrack (VSEP) 19" module - RF module without antenna	UBR 320 N 27 dB @ 1.5 GHz 40-60 VDC or 20-36 VDC (+20 % to -10 %) < 18.0 W 4.0 kg/2.5 kg 5.0 kg 5.0 kg 290x115x200/45x480x240 230x200x110
Climatic conditions	Operation range (temperature/humidity): - System part - RF part Guaranteed temperature range for functional operation - System part - RF part Storage temperature	-5°C to +50°C/5 % to 95 % -50°C to +50°C/8 % to 100 % -25°C to +55°C -55°C to +85°C -55°C to +85°C
Electromagnetic compatibility	ETS standard Radiation Immunity compliance to	ETS 300 385, class B EN 55022, 40/47 µV/m IEC 1000-4-6, 10 V/m, IEC 1000-4-2, IEC 1000-4-4