

SparkWave SDR GE

SparkWave SDR GE High Capacity Ethernet Radio



SPARKWAVE digital microwave radio

Applications:

- Backbone networks for packet service providers
- Cellular/WiMAX backhaul networks
- Fixed wireless networks
- Enterprise/corporate campus/business park LAN extension
- Replace carrier leased lines, eliminate expensive recurring costs
- Wireless IP/Ethernet Video Streaming/Surveillance
- Access networks for Enterprises
- Multi-service private wireless networks for energy, traffic, utilities operators.

SparkWave SDR GE is a high-performance, easy-to-use splitmount, point-to-point wireless microwave RF radio link, designed for high capacity Gigabit Ethernet applications.

Operating frequency ranges from 5 to 38 GHz, modulation up to QAM256 and bandwidth up to 56 MHz can assure effective, flexible and scalable connections even for very long distances and/or for very high capacities.

ACM (Adaptive Coding & Modulation) in combination with QoS (Quality of Service) guarantees maximal spectral efficiency, while preserving transmission of real-time critical services without latency variation, even in case of bad weather or other propagation conditions.

Beside Ethernet interface up to 16 E1 interfaces could be configured. This enables smooth transition from TDM mode to packet transmission mode.

SparkWave SDR GE provides interconnection between remote LAN segments at very high speed and utilizes Gigabit Ethernet protocols with very low latency.

SparkWave SDR GE is ideal solution for network operators who require high-capacity GE transmission in combination with some legacy TDM.

SparkWave SDR GE is designed to provide high-capacity wireless IP connectivity for the most demanding networks including triple play applications, mobile and fixed wireless technologies such as CDMA, WiMAX, Wi-Fi, LTE, HSPA+ and more...

Features:

- Split-mount or optional all-indoor architecture.
- Frequency bands: 5, 6, 7, 8, 11, 13, 15, 18, 23, 38 GHz
- Modulation up to QAM256
- Bandwidth up to 56MHz
- Bitrate up to 400Mb/s
- SFP for GE interface optical/electrical
- Ethernet 10/100/1000 electrical interface
- Up to 16 E1 interfaces
- Indoor unit 10 high
- Redundant power feeding
- Adaptive coding and modulation

Benefits:

- Quick and easy deployment and operation
- Software-defined architecture, for easy adaptation to changing conditions and future needs.
- Easily upgrade throughput as you need it, with no hardware replacements
- Forward Error Correction technique LDPC (Low Density Parity Code) increases the link system gain
- Effective management integration using Java Web Start GUI and SNMP protocol transported by an embedded IP/OSPF telemanagement network.
- Compact solutions improves place and energy efficiency that can help lower operating expenses
- Easy migration from TDM to IP or all-IP backbone/backhaul.
- Low OPEX/CAPEX.

SparkWave SDR GE



SparkWave SDR GE

Frequency Bands		5 GHz	6 GHz	6 GHz	7 GHz	8 GH:	z 11G
	Op. Freq. Range (GHz	.) 4.4-5.0	5.9-6.4	6.4-7.1	7.1-7.9	7.7-8.	.5 10.7-
E	IRF CH. Spacing (MITZ)	20, 40	29.00/09.0	40	7/14/20/00	//14/20/00, 2	9.00/09.0 40
Frequency Banas	On Fred Rande (GHz	13 GHZ	15 GHZ	18 GHZ 17 7-19 7	23 GHZ 21 2-23 6	20 GHZ	38 GH2 5 37-39 P
	RF Ch. Spacina (MHZ)	7/14/28/56	7/14/28/56	13.75/27.5/55	7/14/28/56	7/14/28/50	6 7/14/28/
PE Parameters		Frequency	5-11 GHz	13-15 GHz	18-26 GHz	38 GHz	
Ki i didinerera	Tx Power (dBm)	QAM4	26/30	24	22	17	
		QAM16/32	24/28	22	20	15	
		QAM64/128	22/26	20	18	13	
		QAM256	21/25	19	17	11	
	RX Sensitivity (abrti)		-94	-93	-92	-91	
		QAM4/28 MHz	-88	-92	-86	-85	
		QAM4/56 MHz	-86	-85	-84	-83	
		QAM16/7 MHz	-86	-85	-84	-83	
		QAM16/14 MHz	-86	-85	-84	-83	
		QAM16/28 MHz	-81	-80	-79	-78	
		QAM16/56 MHz	-/8	-//	-76	-75	
			-83	-82	-81	-80	
		QAM32/28 MHz	-03	-02	-75	-74	
		QAM32/40 MHz	-75	70	,0	7 -	
		QAM32/56 MHz	-76	-75	-74	-73	
		QAM64/40 MHz	-72				
	(QAM128/14 MHz	-77	-76	-75	-74	
	6	QAM128/28 MHz	-71	-70	-69	-68	
	e	2AM128/40 MHz	-69	67	66	65	
	E C	SAM256/28 MHz	-00	-66	-65	-64	
	e	QAM256/56 MHz	-66	-65	-64	-63	
	Frequency stability Frequency setting step ATPC output power ac	o diustina ranae	±10 pp 0.25 MH 20 dB ir	om Hz 1 dB step			
PDH	Interface		Up to 10 120/75	6 x E1, G.703 poir Ohm - SW define	nt 6., 2.048 kb d	it/s	
Ethernet	Interface		1 x elec	trical 10/100/100	OBaseT RJ45		
Ethernet	Interface		1 x electron 1 x 1	trical 10/100/100 000Base-SX/LX/C>	0BaseT RJ45 < SFP module		
Ethernet	Interface Frame lenght		1 x elect or 1 x 1 Up to 90	trical 10/100/100 000Base-SX/LX/C> 600 byte	0BaseT RJ45 (SFP module		
Ethernet	Interface Frame lenght QoS		1 x elect or 1 x 1 Up to 9 2 Tx pric	etrical 10/100/100 000Base-SX/LX/C> 600 byte prity queues base	0BaseT RJ45 (SFP module d on VLAN ID		
Ethernet Throughput	Interface Frame lenght QoS	bandwidth	1 x elector or 1 x 1 Up to 9 2 Tx price 56 MHz	xtrical 10/100/100 000Base-SX/LX/C> 600 byte prity queues base 40 MHz	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz	14MHz	7MHz
Ethernet Throughput	Interface Frame lenght QoS Bitrate (Mbit/s)	bandwidth QAM256	1 x elect or 1 x 1 Up to 96 2 Tx pric 56 MHz 351	trical 10/100/100 000Base-SX/LX/C> 600 byte prity queues base 40 MHz	OBaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174	14MHz	7MHz
Ethernet Throughput	Interface Frame lenght QoS Bitrate (Mbit/s)	bandwidth QAM256 QAM128 QAM64	1 x elect or 1 x 1 Up to 9 2 Tx pric 56 MHz 351 298	otrical 10/100/100 000Base-SX/LX/C> 500 byte prity queues base 40 MHz 225 191	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154	14MHz 77	7MHz
Ethernet Throughput	Interface Frame lenght QoS Bitrate (Mbit/s)	bandwidth QAM256 QAM128 QAM64 QAM32	1 x elec or 1 x 1 Up to 9 2 Tx pric 56 MHz 351 298 196	otrical 10/100/100 000Base-SX/LX/C> 500 byte prity queues base 40 MHz 225 191 155	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92	14MHz 77 53	7MHz 26
Ethernet Throughput	Interface Frame lenght QoS Bitrate (Mbit/s)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16	1 x elec or 1 x 1 Up to 9 2 Tx pric 56 MHz 351 298 196 157	otrical 10/100/100 000Base-SX/LX/C> 500 byte prity queues base 40 MHz 225 191 155	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73	14MHz 77 53 43	7MHz 26 20
Ethernet Throughput	Interface Frame lenght QoS Bitrate (Mbit/s)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4	1 x elec or 1 x 1 Up to 9 2 Tx pric 56 MHz 351 298 196 157 78	otrical 10/100/100 000Base-SX/LX/C> 500 byte prity queues base 40 MHz 225 191 155	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73 37	14MHz 77 53 43 21	7MHz 26 20 9
Ethernet Throughput	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4	1 x elec or 1 x 1 Up to 9 2 Tx pric 56 MHz 351 298 196 157 78 367	ctrical 10/100/100 000Base-SX/LX/C> 500 byte vrity queues base 40 MHz 225 191 155 266	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73 37 183	14MHz 77 53 43 21 90	7MHz 26 20 9 45
Ethernet Throughput Latency	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth	1 x elec or 1 x 1 Up to 9 2 Tx pric 56 MHz 351 298 196 157 78 367 56 MHz	trical 10/100/100 000Base-SX/LX/C> 600 byte vrity queues base 40 MHz 225 191 155 266 40 MHz	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz	14MHz 77 53 43 21 90 14MHz	7MHz 26 20 9 45 7MHz
Ethernet Throughput Latency	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256	1 x elect or 1 x 1 Up to 90 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174	trical 10/100/100 000Base-SX/LX/C> 500 byte vrity queues base 40 MHz 225 191 155 266 40 MHz	0BaseT RJ45 (SFP module) 28 MHz 174 154 92 73 37 183 28 MHz 367	14MHz 77 53 43 21 90 14MHz	7MHz 26 20 9 45 7MHz
Ethernet Throughput Latency	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM128	1 x elec or 1 x 11 Up to 9 2 Tx pric 351 298 196 157 78 367 56 MHz 174 184	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127	0BaseT RJ45 (SFP module) 28 MHz 174 154 92 73 37 183 28 MHz 367 184	14MHz 77 53 43 21 90 14MHz 356	7MHz 26 20 9 45 7MHz
Ethernet Throughput Latency	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 Dandwidth QAM256 QAM128 QAM64 QAM32	1 x elec or 1 x 11 Up to 9 2 Tx pric 56 MHz 351 298 196 157 78 367 56 MHz 174 184	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 107	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174	14MHz 77 53 43 21 90 14MHz 356 300	7MHz 26 20 9 45 7MHz
Ethernet Throughput Latency	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16	1 x elec or 1 x 11 Up to 9 2 Tx pric 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 127 107	0BaseT RJ45 (SFP module) 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210	14MHz 77 53 43 21 90 14MHz 356 300 355	7MHz 26 20 9 45 7MHz 588 729
Ethernet Throughput Latency	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM16 QAM4	1 x elec or 1 x 11 Up to 9 2 Tx pric 351 298 196 157 78 367 56 MHz 174 184 151 187 356	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 127 107	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387	14MHz 77 53 43 21 90 14MHz 356 300 355 676	7MHz 26 20 9 45 7MHz 588 729 1362
Ethernet Throughput Latency Management	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) Protocols	bandwidth QAM256 QAM128 QAM4 QAM32 QAM16 QAM4	1 x elec or 1 x 11 Up to 9 2 Tx pric 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP. C	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 107	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387	14MHz 77 53 43 21 90 14MHz 356 300 355 676	7MHz 26 20 9 45 7MHz 588 729 1362
Ethernet Throughput Latency Management	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) Protocols Interfaces	bandwidth QAM256 QAM128 QAM4 QAM32 QAM16 QAM4	1 x elect or 1 x 11 Up to 9, 2 Tx price 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 107 221, Telnet	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387	14MHz 77 53 43 21 90 14MHz 356 300 355 676	7MHz 26 20 9 45 7MHz 588 729 1362
Ethernet Throughput Latency Management	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) 64 byte frame (µs) Protocols Interfaces Data Communication	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4	1 x elect or 1 x 11 Up to 9, 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 127 107 21, Telnet 1000BaseT, RS-23 ded service char	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router	7MHz 26 20 9 45 7MHz 588 729 1362
Ethernet Throughput Latency Management	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) Protocols Interfaces Data Communication	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 as Network	1 x elect or 1 x 11 Up to 9, 2 Tx price 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 127 107 21, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95%	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 annel and OSPF ETSI EN 300 01	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 closs 3.1E	7МНz 26 20 9 45 7МНz 588 729 1362
Ethernet Throughput Latency Management Environmental	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) 64 byte frame (µs) Protocols Interfaces Data Communication Operation climatic co	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM64 QAM32 QAM4 No Network	1 x elect or 1 x 11 Up to 9/ 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed IDU: -5° ODU: -3	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 127 107 CLI, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95% 3°-+50° C/5%-10	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 anel and OSPF ETSI EN 300 01 00% ETSI EN 300 01	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 class 3.1E 0 019 class 4.	7MHz 26 20 9 45 7MHz 588 729 1362
Ethernet Throughput Latency Management Environmental	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) Protocols Interfaces Data Communication Operation climatic co	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 Ns Network	1 x elect or 1 x 1 Up to 9% 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed IDU: -5° ODU: -3 ODU: -5	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 127 107 CLI, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95% (3°-+50° C/5%-10 50°C - +50° C opt	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 mnel and OSPF ETSI EN 300 01 00% ETSI EN 300 01	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 class 3.1E 10 019 class 4.	7MHz 26 20 9 45 7MHz 588 729 1362
Ethernet Throughput Latency Management Environmental	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) 64 byte frame (µs) Protocols Interfaces Data Communication Operation climatic construction	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 Dandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 NS Network	1 x elect or 1 x 1 Up to 9, 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed IDU: -5° ODU: -5° ODU: -5°	trical 10/100/100 000Base-SX/LX/C> 600 byte writy queues based 40 MHz 225 191 155 266 40 MHz 127 127 127 107 CLI, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95% i3°+50° C/5%-10 0°C - +50° C op 300 019 class 1.1	0BaseT RJ45 (SFP module) d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 nnel and OSPF ETSI EN 300 01 00% ETSI EN 300 10% ETSI EN 300	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 class 3.1E 10 019 class 4.	7MHz 26 20 9 45 7MHz 588 729 1362
Ethernet Throughput Latency Management Environmental	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) 64 byte frame (µs) Protocols Interfaces Data Communication Operation climatic con Storage/transport con EMC compatibility	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 as Network ponditions	1 x elect or 1 x 1 Up to 9% 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed IDU: -5° ODU: -3 ODU: -5 ETSI EN ETSI 301	trical 10/100/100 000Base-SX/LX/C> 600 byte 40 MHz 225 191 155 266 40 MHz 127 127 127 107 CLI, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95% 3°-+50° C/5%-10 0°C - +50° C op 300 019 class 1.1 489-4	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 nnel and OSPF ETSI EN 300 01 00% ETSI EN 300 01 00% ETSI EN 300 01 00% ETSI EN 300 01	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 class 3.1E 0 019 class 4.	7MHz 26 20 9 45 7MHz 588 729 1362 1
Ethernet Throughput Latency Management Environmental Power	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) 64 byte frame (µs) Protocols Interfaces Data Communication Operation climatic con Storage/transport con EMC compatibility Power Supply	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 as Network ponditions	1 x elect or 1 x 1 Up to 9, 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed IDU: -5° ODU: -3 ODU: -5 ETSI EN ETSI 301 -40 V to	trical 10/100/100 000Base-SX/LX/C> 600 byte writy queues based 40 MHz 225 191 155 266 40 MHz 127 127 127 107 CLI, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95% 13°+50° C/5%-10 0°C - +50° C option: -3	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 nnel and OSPF ETSI EN 300 01 00% ETSI EN 30 010% CTSI EN 30 010% CTSI EN 30 01 00% CTSI EN 30 10% CTSI EN	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 class 3.1E 0 019 class 4.	7MHz 26 20 9 45 7MHz 588 729 1362 1
Ethernet Throughput Latency Management Environmental Power	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) Protocols Interfaces Data Communication Operation climatic con Storage/transport con EMC compatibility Power consumption	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 as Network and tions	1 x elect or 1 x 1 Up to 94 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed IDU: -5° ODU: -3° ODU: -5 ETSI EN ETSI 301 -40 V to IDU: <2	trical 10/100/100 000Base-SX/LX/C> 600 byte wity queues based 40 MHz 225 191 155 266 40 MHz 127 127 127 107 CLI, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95% 13°-+50° C/5%-10 0°C - +50° C opti 300 019 class 1.1 489-4 0 -58 V (option: -3 5 W; ODU: <30 W	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 anel and OSPF ETSI EN 300 01 00% ETSI EN 30 00% ETSI EN 30 10% (tipically), <20%	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 class 3.1E 10 019 class 4.	7MHz 26 20 9 45 7MHz 588 729 1362 1 ver option)
Ethernet Throughput Latency Management Environmental Power Mechanical	Interface Frame lenght QoS Bitrate (Mbit/s) Max Bitrate for ACM 64 byte frame (µs) Protocols Interfaces Data Communication Operation climatic con Storage/transport con EMC compatibility Power Supply Power consumption Dimensions (HxWxD)	bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 bandwidth QAM256 QAM128 QAM64 QAM32 QAM16 QAM4 as Network and tions	1 x elect or 1 x 1 Up to 94 2 Tx price 56 MHz 351 298 196 157 78 367 56 MHz 174 184 151 187 356 SNMP, C 10/100/ Embed IDU: -5° ODU: -3° ODU: -5° ODU: -5° OD	trical 10/100/100 000Base-SX/LX/C> 600 byte wity queues base 40 MHz 225 191 155 266 40 MHz 127 127 127 107 CLI, Telnet 1000BaseT, RS-23 ded service char -+40°C/8%-95% i3°-+50° C/5%-10 0°C - +50° C option 300 019 class 1.1 489-4 0 -58 V (option: -3 5 W; ODU: <30 W c442x240 mm	0BaseT RJ45 (SFP module d on VLAN ID 28 MHz 174 154 92 73 37 183 28 MHz 367 184 174 210 387 32 anel and OSPF ETSI EN 300 01 00% ETSI EN 30 00% ETSI EN 30 6 V to -72 V) V (tipically), <2	14MHz 77 53 43 21 90 14MHz 356 300 355 676 router 9 class 3.1E 10 019 class 4.	7MHz 26 20 9 45 7MHz 588 729 1362 1 ver option)



Iskra, d.d. Stegne 21 SI-1000 Ljubljana, Slovenia

Phone: +386 (0) 1 51 31 000 www.iskra.eu



 \bigcirc