

TELESTE AC 9100

1.2 GHZ INTELLIGENT FIBRE OPTIC PLATFORM

Der AC9100 ist ein intelligenter, 2 x 4 segmentierbarer Node. Er bietet hohe Ausgangspegel (U_{max} 112 QAM / 114.0 dB μ V) und unterstützt 1.2 GHz/204 MHz Bandbreite. Remote-Monitoring und Remote-Control ist mittels Transponder-Modul verfügbar (HMS/CATVisor or DOCSIS).



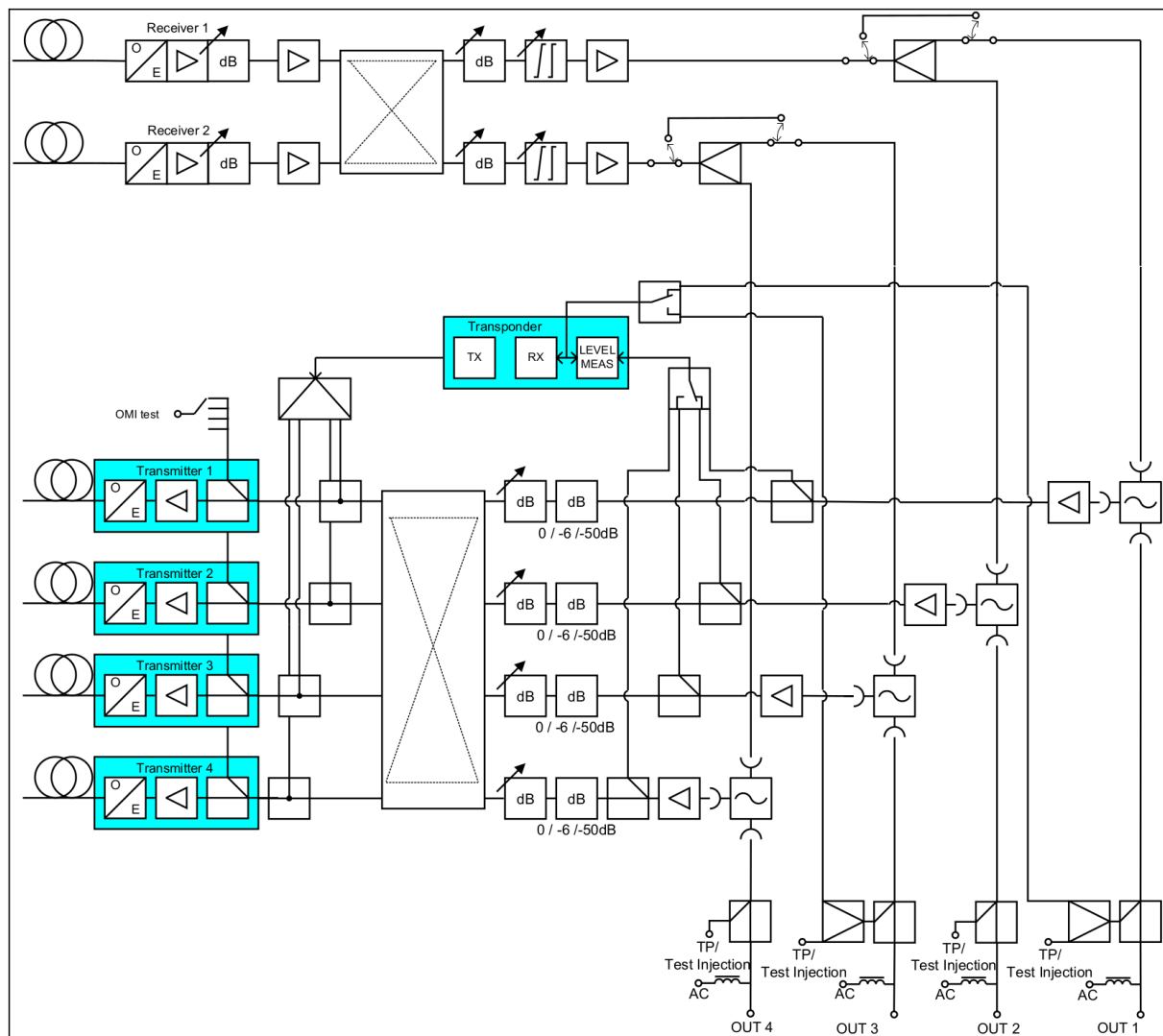
- 1.2 GHz GaN HEMT Technologie
- Rückweg unterstützt 204 MHz Bandbreite
- Innovative Spleiß-Organisation
- Redundante Stromversorgungen
- Vollständige elektrische Überwachung
- Automatische Anpassung von DS und US
- Flexibles elektrisch gesteuertes Signal-Routing für Vor- und Rückweg
- Unterstützung für digitale Rückweg-Transmitter
- Fixe Downstream-Empfänger
- Effizienter ESD- und Überspannungsschutz
- Mit AC6992/AC6980 Transponder Plug-in verfügbar: CATVisor / HMS (AC6992) oder DOCSIS (AC6980) Remote-Verbindung, ALC mit programmierbaren Pilot-Trägern, Downstream Spectrum Analyser, Upstream Signalqualitäts-Monitoring mit automatischer Einstrahlungsüberwachung, echtes Plug-and-Play mit einzelnen Drucktasten und Rückweg Pilot Generator (AC6992)

SPEZIFIKATIONEN

FORWARD PATH		
Light wavelength	nm	1290...1610
Optical input power range	dBm	-8...0
Frequency range	MHz	85...1218
Return loss	dB	18
Gain limited output level	dB μ V	4 x 115 dB μ V / 2 x 119
Input gain control	dB	0...-26
Interstage gain control	dB	0...-15
Slope control	dB	0...20
Isolation between DS paths	dB	> 60
Flatness	dB	\pm 0.5
Group delay	ns	2
Test point	dB	-20
Transponder connection	dB	-24
Noise current density	pA/ \sqrt Hz	6.0
U _{max} (112 QAM channels) @1.0 GHz	dB μ V	114.0
U _{max} (138 QAM channels) @1.2 GHz	dB μ V	111.5
CTB 41 channels	dB μ V	119.0
CSO 41 channels	dB μ V	119.0
RETURN PATH		
Frequency range	MHz	5...204
Return loss	dB	18
Ingress switching	dB	0 / -6 / < -45
OMI adjustment	dB	0...-20
OMI test point	dB	-5
Transponder connection	dB	-38
Isolation between US paths	dB	> 55

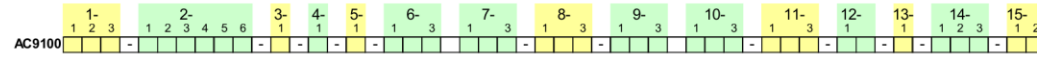
GENERAL		
Power consumption	W	47
Supply voltage AC	V	30...65
Maximum current feed through	A	12.0 / port
Hum modulation	dB	70
Optical connectors		SC/APC, E-2000
Output connectors		PG11
Test point connectors		F female
Dimensions (h x w x d)	mm	330 (360) x 310 (350) x 140
Weight	kg	10
Operating temperature	°C	-40...+55
Class of enclosure		IP 54
EMC		EN50083-2
ESD	kV	4
Surge	kV	6 (EN 60728-3)

BLOCKDIAGRAMM



BESTELLINFORMATIONEN

AC9100 configuration map



<p>1-1 Platform type A Standard 12 GHz</p> <p>1-2 Power supply A Single PSU, 65 VAC B Double PSUs, 65 VAC D Customer specific option</p> <p>1-3 Fiber organizing A Standard fibre organiser B Customer specific option</p>	<p>7-1 Digital return path transmitter TX1 27 +5 dBm CWDM 1270 nm (AC7727) 28 +5 dBm CWDM 1290 nm (AC7729) 31 +5 dBm CWDM 1310 nm (AC7731) 33 +5 dBm CWDM 1330 nm (AC7733) 35 +5 dBm CWDM 1350 nm (AC7735) 37 +5 dBm CWDM 1370 nm (AC7737) 39 +5 dBm CWDM 1390 nm (AC7739) 41 +5 dBm CWDM 1410 nm (AC7741) 43 +5 dBm CWDM 1430 nm (AC7743) 45 +5 dBm CWDM 1450 nm (AC7745) 47 +5 dBm CWDM 1470 nm (AC7747) 49 +5 dBm CWDM 1490 nm (AC7749) 51 +5 dBm CWDM 1510 nm (AC7751) 53 +5 dBm CWDM 1530 nm (AC7753) 55 +5 dBm CWDM 1550 nm (AC7755) 57 +5 dBm CWDM 1570 nm (AC7757) 59 +5 dBm CWDM 1590 nm (AC7759) 61 +5 dBm CWDM 1610 nm (AC7761) XX None</p> <p>7-3 Optical connector for Digital transmitter TX1 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg. X None</p>	<p>10-1 Digital return path transmitter TX2 27 +5 dBm CWDM 1270 nm (AC7727) 29 +5 dBm CWDM 1290 nm (AC7729) 31 +5 dBm CWDM 1310 nm (AC7731) 33 +5 dBm CWDM 1330 nm (AC7733) 35 +5 dBm CWDM 1350 nm (AC7735) 37 +5 dBm CWDM 1370 nm (AC7737) 39 +5 dBm CWDM 1390 nm (AC7739) 41 +5 dBm CWDM 1410 nm (AC7741) 43 +5 dBm CWDM 1430 nm (AC7743) 45 +5 dBm CWDM 1450 nm (AC7745) 47 +5 dBm CWDM 1470 nm (AC7747) 49 +5 dBm CWDM 1490 nm (AC7749) 51 +5 dBm CWDM 1510 nm (AC7751) 53 +5 dBm CWDM 1530 nm (AC7753) 55 +5 dBm CWDM 1550 nm (AC7755) 57 +5 dBm CWDM 1570 nm (AC7757) 59 +5 dBm CWDM 1590 nm (AC7759) 61 +5 dBm CWDM 1610 nm (AC7761) XX None</p> <p>10-3 Optical connector for Digital transmitter TX2 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg. X None</p>
<p>2-1 Fibre feed-through adapter 1 (left) E 5/8 Adapter (KDC316) G 1.4 fibres (KDO900) X None</p> <p>2-2 Fibre feed-through adapter 2 (right) E 5/8 Adapter (KDC316) G 1.4 fibres (KDO900) X None</p> <p>2-3 Output 1 connection (first from right) A PG11 B 5/8" C EC D 3.5/12 E F X None (PG11sealing plug)</p> <p>2-4 Output 2 connection A PG11 B 5/8" C EC D 3.5/12 E F X None (PG11sealing plug)</p> <p>2-5 Output 3 connection A PG11 B 5/8" C EC D 3.5/12 E F X None (PG11sealing plug)</p> <p>2-6 Output 4 connection (first from left) A PG11 B 5/8" C EC D 3.5/12 E F X None (PG11sealing plug)</p>	<p>8-1 Return path transmitter TX2 40 +1 dBm FP 1310 nm (AC67840) 41 +3 dBm CWDM 1430 nm (AC67841) 42 +6 dBm CWDM 1430 nm (AC67842) 43 +3 dBm CWDM 1450 nm (AC67843) 44 +6 dBm CWDM 1450 nm (AC67844) 45 +3 dBm DFB 1310 nm (AC67845) 46 +6 dBm DFB 1310 nm (AC67846) 47 +3 dBm CWDM 1470 nm (AC67847) 48 +6 dBm CWDM 1470 nm (AC67848) 49 +3 dBm CWDM 1490 nm (AC67849) 50 +6 dBm CWDM 1490 nm (AC67850) 51 +3 dBm CWDM 1510 nm (AC67851) 52 +6 dBm CWDM 1510 nm (AC67852) 53 +3 dBm CWDM 1530 nm (AC67853) 54 +6 dBm CWDM 1530 nm (AC67854) 55 +3 dBm CWDM 1550 nm (AC67855) 56 +6 dBm CWDM 1550 nm (AC67856) 57 +3 dBm CWDM 1570 nm (AC67857) 58 +6 dBm CWDM 1570 nm (AC67858) 59 +3 dBm CWDM 1590 nm (AC67859) 60 +6 dBm CWDM 1590 nm (AC67860) 61 +3 dBm CWDM 1610 nm (AC67861) 62 +6 dBm CWDM 1610 nm (AC67862) XX None</p> <p>8-3 Optical connector for transmitter TX2 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg. X None</p>	<p>11-1 Return path transmitter TX4 40 +1 dBm FP 1310 nm (AC67840) 41 +3 dBm CWDM 1430 nm (AC67841) 42 +6 dBm CWDM 1430 nm (AC67842) 43 +3 dBm CWDM 1450 nm (AC67843) 44 +6 dBm CWDM 1450 nm (AC67844) 45 +3 dBm DFB 1310 nm (AC67845) 46 +6 dBm DFB 1310 nm (AC67846) 47 +3 dBm CWDM 1470 nm (AC67847) 48 +6 dBm CWDM 1470 nm (AC67848) 49 +3 dBm CWDM 1490 nm (AC67849) 50 +6 dBm CWDM 1490 nm (AC67850) 51 +3 dBm CWDM 1510 nm (AC67851) 52 +6 dBm CWDM 1510 nm (AC67852) 53 +3 dBm CWDM 1530 nm (AC67853) 54 +6 dBm CWDM 1530 nm (AC67854) 55 +3 dBm CWDM 1550 nm (AC67855) 56 +6 dBm CWDM 1550 nm (AC67856) 57 +3 dBm CWDM 1570 nm (AC67857) 58 +6 dBm CWDM 1570 nm (AC67858) 59 +3 dBm CWDM 1590 nm (AC67859) 60 +6 dBm CWDM 1590 nm (AC67860) 61 +3 dBm CWDM 1610 nm (AC67861) 62 +6 dBm CWDM 1610 nm (AC67862) XX None</p> <p>11-3 Optical connector for transmitter TX4 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg. X None</p>
<p>3-1 Optical connector for receiver RX1 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg.</p> <p>4-1 Optical connector for receiver RX2 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg.</p> <p>5-1 Diplexer filter D 65/85 MHz (4 x CXF065) G 65/85 MHz (4 x CXF065 19) H 85/105 MHz (4 x CXF085) I 85/105 MHz (4 x CXF085 19)NA J 204/258 MHz (4 x CXF204) V Customer specific W Customer specific X None</p> <p>6-1 Return path transmitter TX1 40 +1 dBm FP 1310 nm (AC67840) 41 +3 dBm CWDM 1430 nm (AC67841) 42 +6 dBm CWDM 1430 nm (AC67842) 43 +3 dBm CWDM 1450 nm (AC67843) 44 +6 dBm CWDM 1450 nm (AC67844) 45 +3 dBm DFB 1310 nm (AC67845) 46 +6 dBm DFB 1310 nm (AC67846) 47 +3 dBm CWDM 1470 nm (AC67847) 48 +6 dBm CWDM 1470 nm (AC67848) 49 +3 dBm CWDM 1490 nm (AC67849) 50 +6 dBm CWDM 1490 nm (AC67850) 51 +3 dBm CWDM 1510 nm (AC67851) 52 +6 dBm CWDM 1510 nm (AC67852) 53 +3 dBm CWDM 1530 nm (AC67853) 54 +6 dBm CWDM 1530 nm (AC67854) 55 +3 dBm CWDM 1550 nm (AC67855) 56 +6 dBm CWDM 1550 nm (AC67856) 57 +3 dBm CWDM 1570 nm (AC67857) 58 +6 dBm CWDM 1570 nm (AC67858) 59 +3 dBm CWDM 1590 nm (AC67859) 60 +6 dBm CWDM 1590 nm (AC67860) 61 +3 dBm CWDM 1610 nm (AC67861) 62 +6 dBm CWDM 1610 nm (AC67862) XX None</p> <p>6-3 Optical connector for transmitter TX1 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg. X None</p>	<p>9-1 Return path transmitter TX3 40 +1 dBm FP 1310 nm (AC67840) 41 +3 dBm CWDM 1430 nm (AC67841) 42 +6 dBm CWDM 1430 nm (AC67842) 43 +3 dBm CWDM 1450 nm (AC67843) 44 +6 dBm CWDM 1450 nm (AC67844) 45 +3 dBm DFB 1310 nm (AC67845) 46 +6 dBm DFB 1310 nm (AC67846) 47 +3 dBm CWDM 1470 nm (AC67847) 48 +6 dBm CWDM 1470 nm (AC67848) 49 +3 dBm CWDM 1490 nm (AC67849) 50 +6 dBm CWDM 1490 nm (AC67850) 51 +3 dBm CWDM 1510 nm (AC67851) 52 +6 dBm CWDM 1510 nm (AC67852) 53 +3 dBm CWDM 1530 nm (AC67853) 54 +6 dBm CWDM 1530 nm (AC67854) 55 +3 dBm CWDM 1550 nm (AC67855) 56 +6 dBm CWDM 1550 nm (AC67856) 57 +3 dBm CWDM 1570 nm (AC67857) 58 +6 dBm CWDM 1570 nm (AC67858) 59 +3 dBm CWDM 1590 nm (AC67859) 60 +6 dBm CWDM 1590 nm (AC67860) 61 +3 dBm CWDM 1610 nm (AC67861) 62 +6 dBm CWDM 1610 nm (AC67862) XX None</p> <p>9-3 Optical connector for transmitter TX3 A SC/APC, 9 deg. C E-2000 D SC/APC, 8 deg. X None</p>	<p>12-1 Optical passive XX None F1¹ WDM and 1490 nm Add Drop with 9 deg. SC/APC connectors F2² WDM with 8 deg. SC/APC connectors F3³ WDM with 9 deg. SC/APC connectors F6⁶ WDM and 1490 nm Add Drop with 8 deg. SC/APC connectors F7⁷ WDM and 1490 nm Add Drop with 8 deg. SC/APC connectors G¹ WDM with 8 deg. SC/APC connectors M1 MUX with SC/APC connectors M2 MUX with SC/APC connectors M3 MUX with SC/APC connectors M4 MUX with SC/APC connectors M5 MUX with SC/APC connectors M8 MUX with SC/APC connectors</p> <p>13-1 Transponder module E Transponder and ALS module (AC6992) G DOCSIS transponder (AC6981) X None</p> <p>14-1 Transponder communication protocol A CATV/visor compatible B HMS/SNMP compatible</p> <p>14-2 Settings X Factory default A Customer specified (ECML file)</p> <p>14-3 Product keys (software features) X None A Auto alignment, spectrum and ingress analyzer, pilot generator B Auto receiver 2 activation C A + B</p> <p>15-1 Customer specific selections B Customer specific option X None</p> <p>15-2 External control port A USB extension cable X None</p>