

# TELESTE AC 3010

## 1.2 GHZ INTELLIGENT TRUNK/DISTRIBUTION AMPLIFIERS

AC3010 is a single active output amplifier with 48 dB maximum gain. It offers high output level (U<sub>max</sub> 115.0 dBμV, 112 channels) and supports 1.2 GHz/204 MHz bandwidth. Remote monitoring and control is available with transponder (HMS/CATVisor or DOCSIS).



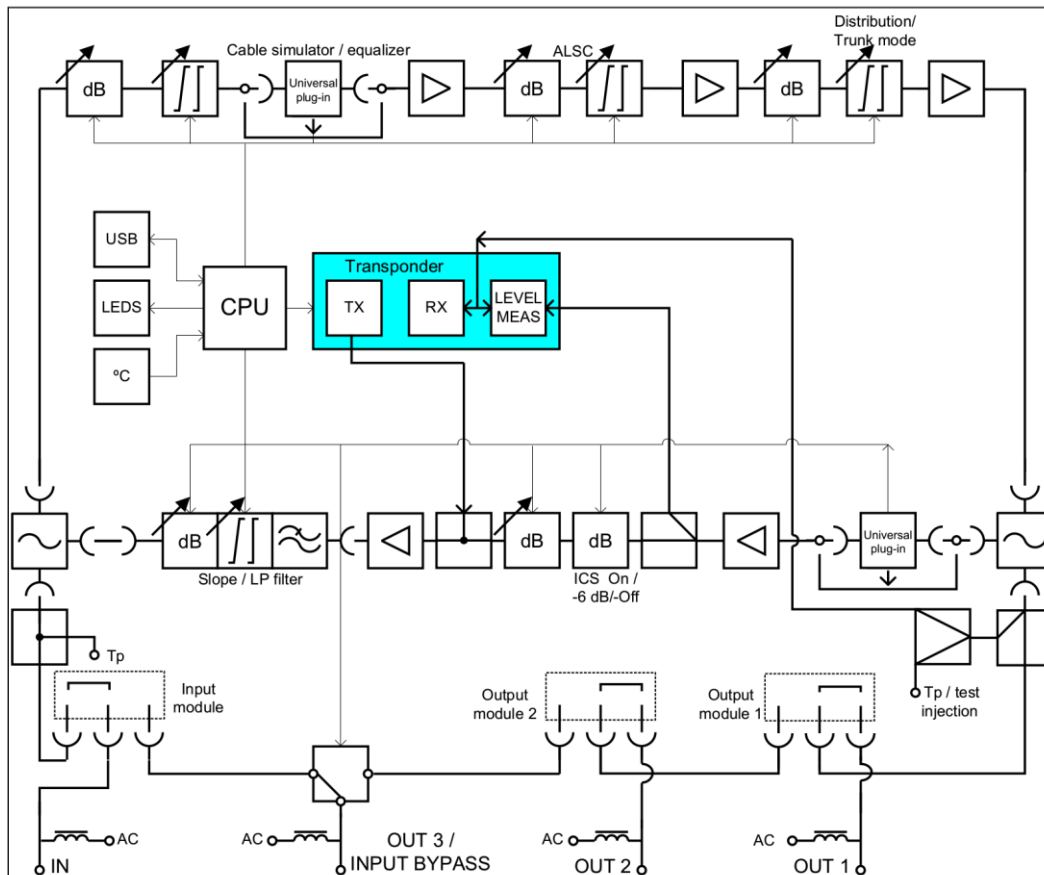
- 1.2 GHz bandwidth
- Electrical adjustments
- Forward amplifiers use the newest GaN HEMT technology
- GaAs push-pull return amplifier on motherboard
- Temperature compensated forward and return path
- Excellent ESD and surge protection
- Remote power supply with PFC
- Android user interface
- With a transponder plug-in module: CATVisor / HMS or DOCSIS remote connection, Remote ingress switch control, ALSC with fully user programmable pilots, Downstream spectrum analyser, Upstream signal monitoring with automatic plug-in and ingress control, True plug-and-play with single pushbutton alignment and Return path pilot generator

## SPECIFICATIONS

| DOWNSTREAM SIGNAL PATH (VALUES WITH DIPLES FILTERS) |      |           |
|-----------------------------------------------------|------|-----------|
| Frequency range                                     | MHz  | 85...1218 |
| Return loss                                         | dB   | 20        |
| Maximum gain                                        | dB   | 48        |
| Input gain control                                  | dB   | -20...0   |
| Input slope control                                 | dB   | 0...20    |
| Input cable simulator                               | dB   | -13       |
| Interstage gain control                             | dB   | -15...0   |
| Nominal interstage slope, distribution mode         | dB   | 13        |
| Nominal interstage slope, trunk mode                | dB   | 7         |
| Interstage gain control, ALC                        | dB   | -10...0   |
| Interstage gain control, output                     | dB   | -10...0   |
| Interstage gain control, distribution mode          | dB   | 9...19    |
| Interstage gain control, trunk mode                 | dB   | 3...13    |
| Pivot frequency selection                           | GHz  | 1.0/1.2   |
| Flatness                                            | dB   | ±0.5      |
| Group delay                                         | ns   | 2         |
| Test point                                          | dB   | -20       |
| Transponder connection                              | dB   | -19       |
| Noise figure                                        | dB   | 8.5       |
| U <sub>max</sub> (112 QAM channels) @1.0 GHz        | dBμV | 115.0     |
| U <sub>max</sub> (138 QAM channels) @1.2 GHz        | dBμV | 112.0     |
| CTB 41 channels                                     | dBμV | 118.0     |
| CSO 41 channels                                     | dBμV | 119.0     |

| UPSTREAM SIGNAL PATH (VALUES WITH DIPLEX FILTERS) |     |                                   |
|---------------------------------------------------|-----|-----------------------------------|
| Frequency range                                   | MHz | 5...204                           |
| Return loss                                       | dB  | 18                                |
| Maximum gain                                      | dB  | 28                                |
| Ingress switching                                 | dB  | 0 / -6 / < -40                    |
| Gain control                                      | dB  | 0...28                            |
| Slope control                                     | dB  | 0...15                            |
| Flatness                                          | dB  | ±0.5                              |
| Transponder connection                            | dB  | -37                               |
| Noise figure                                      | dB  | 6.5                               |
| GENERAL                                           |     |                                   |
| Power consumption (65 & 90 / 230 V AC)            | W   | 28 / 30                           |
| Supply voltage AC                                 | V   | 27...65 / 40...90 / 205...255 V   |
| Maximum current feed through                      | A   | 7.0 / port                        |
| Hum modulation                                    | dB  | 70                                |
| Resistance for remote current                     | mΩ  | 25 / port                         |
| Input / Output connectors                         |     | PG11 (several adaptors available) |
| Test point connectors                             |     | F female                          |
| Dimensions (h x w x d)                            | mm  | 245 x 255 x 100                   |
| Weight                                            | kg  | 3.0                               |
| Operating temperature                             | °C  | -40...+55                         |
| Class of enclosure                                |     | IP 67                             |
| Environmental (salt mist, cyclic)                 |     | IEC 60068-2-52, severity 1        |
| Safety                                            |     | EN60728-11 / EN60065              |
| EMC                                               |     | EN50083-2                         |
| ESD                                               | kV  | 4                                 |
| Surge                                             | kV  | 6 (EN 60728-3)                    |

## BLOCK DIAGRAM



## ORDERING INFORMATION

### AC3010 configuration map

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| <b>AC3010</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     | -       |     | -     |   | - |       |   |
| <div> <div> <b>1-1 Gain and housing</b><br/> <b>B</b> 44 dB, 1.2 GHz </div> <div> <b>1-2 Power supply</b><br/> <b>A</b> Local powering, euro plug (230 VAC)<br/> <b>B</b> Remote powering with cable clamp (65 VAC)<br/> <b>C</b> Local powering, UK plug (230 VAC) </div> <div> <b>2-1 Input connection (first from left)</b><br/> <b>A</b> PG11<br/> <b>B</b> 5/8"<br/> <b>C</b> IEC<br/> <b>D</b> 3.5/12<br/> <b>E</b> F </div> <div> <b>2-2 Input by-pass/output 3 connection</b><br/> <b>A</b> PG11<br/> <b>B</b> 5/8"<br/> <b>C</b> IEC<br/> <b>D</b> 3.5/12<br/> <b>E</b> F<br/> <b>X</b> None (PG11 sealing plug) </div> <div> <b>2-3 Output 2 connection</b><br/> <b>A</b> PG11<br/> <b>B</b> 5/8"<br/> <b>C</b> IEC<br/> <b>D</b> 3.5/12<br/> <b>E</b> F<br/> <b>X</b> None (PG11 sealing plug) </div> <div> <b>2-4 Output 1 connection (first from right)</b><br/> <b>A</b> PG11<br/> <b>B</b> 5/8"<br/> <b>C</b> IEC<br/> <b>D</b> 3.5/12<br/> <b>E</b> F </div> <div> <b>3-1 Input module</b><br/> <b>A</b> 0 dB, no by-pass (AC6110)<br/> <b>X</b> None </div> <div> <b>3-2 Diplexer filters</b><br/> <b>A</b> 65/85 MHz (2 x CXF065 + AC6254)<br/> <b>B</b> 85/105 MHz (2 x CXF085 + AC6255)<br/> <b>C</b> 204/258 MHz (2 x CXF204 + AC6256)<br/> <b>D</b> 204/258 MHz (2 x CXF204 + AC6257)<br/> <b>G</b> 65/85 MHz (CXF065+CXF065 19 + AC6254)<br/> <b>K</b> 204/258 MHz (CXF204+CXF204 19 + AC6257)<br/> <b>X</b> None </div> <div> <b>4-1 Forward path universal plug</b><br/> <b>X</b> None </div> <div> <b>4-2 Output module 1</b><br/> <b>A</b> 0 dB (AC6120)<br/> <b>B</b> Splitter - 3.7 dB, (AC6124)<br/> <b>X</b> None </div> <div> <b>4-3 Future reservation</b><br/> <b>X</b> None </div> <div> <b>5-1 Return path universal plug</b><br/> <b>A</b> Ingress blocker (AC6223)<br/> <b>X</b> None </div> <div> <b>6-1 Transponder module</b><br/> <b>D</b> ALSC+RIS module (AC6918)<br/> <b>E</b> Transponder and ALSC module (AC6992)<br/> <b>F</b> RIS module (AC6915)<br/> <b>G</b> DOCSIS transponder (AC6981)<br/> <b>X</b> None </div> <div> <b>7-1 Communication protocol / application software</b><br/> <b>X</b> None<br/> <b>A</b> CATVisor compatible<br/> <b>B</b> HMS/SNMP compatible<br/> <b>C</b> Customer specific </div> <div> <b>7-2 Settings</b><br/> <b>X</b> Factory default<br/> <b>A</b> Customer specified (ECML file) </div> <div> <b>7-3 Product keys (software features)</b><br/> <b>X</b> None<br/> <b>C</b> Auto alignment, spectrum and ingress analyser, pilot generator </div> <div> <b>8-1 Customer specific selections</b><br/> <b>B</b> Customer specific option<br/> <b>D</b> Mounting bracket AC6427<br/> <b>X</b> None </div> </div> |     |         |     |       |   |   |       |   |

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