

# WISI LR 41 x xxxx

Remote-PHY MDU Node

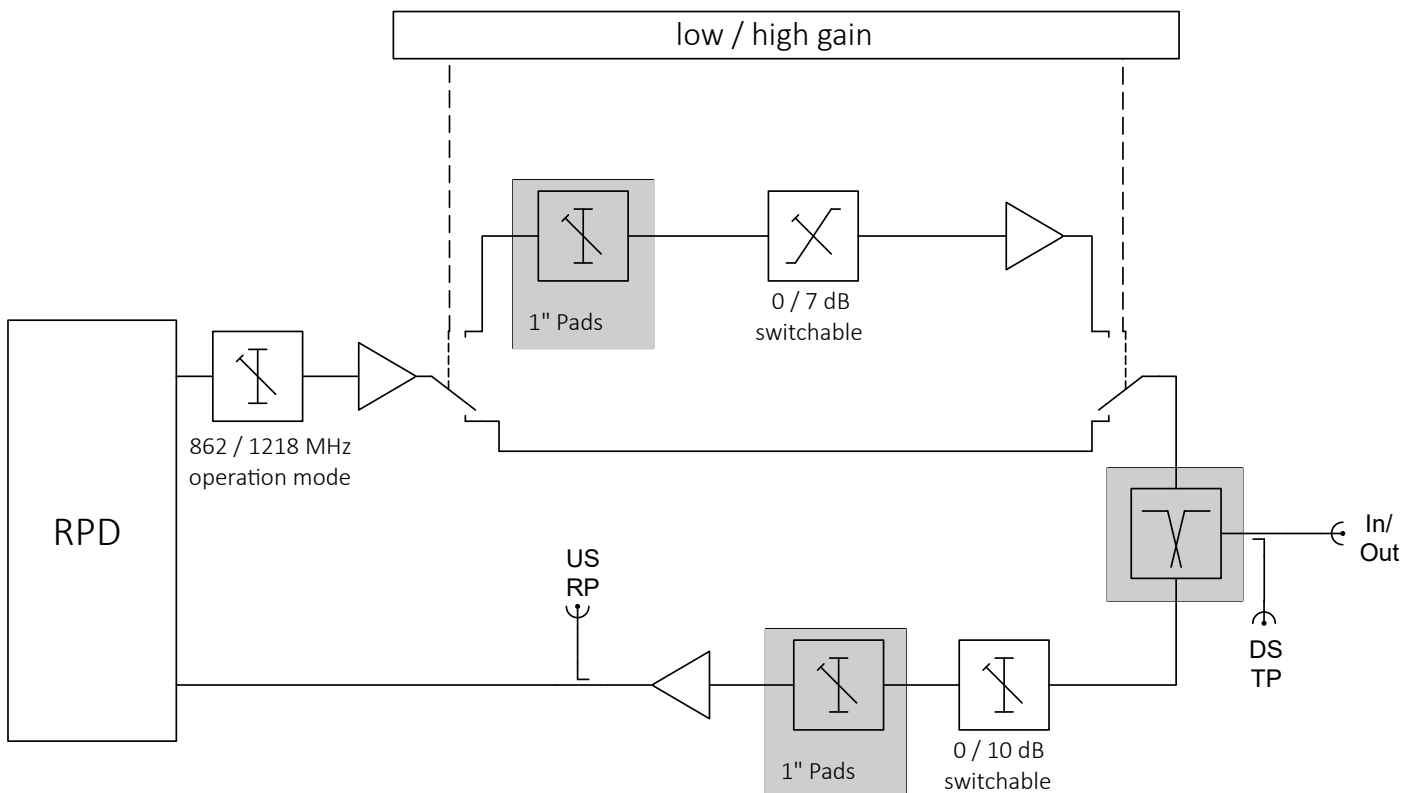


## At a glance:

- Remote PHY Node with one active output for harmonic CableOS Systems
- All settings (level, slope etc.) by 1" PADs and Jumper
- Configurable gain option (low/high) incl. EcoMode
- Pluggable Diplexer
- Precision IEEE 1588 PTP synchronization
- Perfectly suitable for deep fiber FTTB-architectures

## Description

Innovation and proven technology combine perfectly in the LR 41 Remote-PHY node. The outstanding RF performance connects coaxial networks to digital core networks with high speed Ethernet backbones of up to 10Gbps. It offers the most flexible way to migrate DOCSIS scenarios with frequencies ranging from 1.2 GHz in downstream to 204 MHz in upstream. This node is perfectly suitable for FTTB deployment because of its compact structure and powerful RPD.



## Technical data

|                                                                  |                                                                                       |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Downstream</b>                                                |                                                                                       |
| <b>Remote PHY</b>                                                |                                                                                       |
| Number of DOCSIS 3.0 Ch.                                         | 120 (Annex A), 158 (Annex B)                                                          |
| Number of DOCSIS 3.1 Ch.                                         | 6 (24...192 MHz per channel)                                                          |
| Number of video Ch.                                              | 70 (Annex A), 90 (Annex B)                                                            |
| <b>RF parameters</b>                                             |                                                                                       |
| Frequency range                                                  | 85...1218 MHz<br>(depending on diplexer)                                              |
| Attenuator                                                       | 0...20 dB (1" PADs)                                                                   |
| Slope                                                            | 0/7 dB switchable<br>(1218 MHz pivot point)                                           |
| Output Level per 8 MHz Channel, flat (121xQAM256), (EN60728-3-1) | low gain: 80 dBμV (BER < 1exp-9)<br>High gain: 100 dBμV (BER < 1exp-9)                |
| Frequency response                                               | <±0.75 dB                                                                             |
| Test point                                                       | -20 dB ±0.75 dB                                                                       |
| Output RF return loss                                            | >18dB (-1dB/oct., min. 14 dB)                                                         |
| <b>Upstream</b>                                                  |                                                                                       |
| <b>Remote PHY</b>                                                |                                                                                       |
| Number of DOCSIS 3.0 Channels                                    | 12 (12x ATDMA, 8x ATDMA + 4x SCDMA)                                                   |
| Number of DOCSIS 3.1 Channels                                    | 2 (6.4...92 MHz per channel)                                                          |
| Upstream Cluster                                                 | 1                                                                                     |
| <b>RF parameters</b>                                             |                                                                                       |
| Frequency range                                                  | 15...204 MHz<br>(depending on diplexer)                                               |
| Frequency response                                               | ±0,5 dB                                                                               |
| Nominal input level                                              | 70...100 dBμV / 6.4 MHz channel                                                       |
| Input attenuator                                                 | 0...30 dB<br>(1" PADs + 0/10 dB Jumper)                                               |
| Test point / Reference point                                     | 65 dBμV / 6.4 MHz Ch. (for 70 dBμV / 6.4 MHz input level @RPD)                        |
| Input RF return loss                                             | >18 dB (-1dB/oct., min. 14 dB)                                                        |
| <b>Interfaces</b>                                                |                                                                                       |
| CIN Interface                                                    | 3x SFP+ (daisy chaining possible),<br>10GBASE-LR, 10Gbase-ER,<br>10GBASE-ZR, 10G xPON |
| RF Interfaces                                                    | 3x F-connector<br>(In/Out, US-TP and DS-TP)                                           |
| <b>General data</b>                                              |                                                                                       |
| Supply voltage                                                   | 230 V AC                                                                              |
| Power consumption                                                | <36 W                                                                                 |
| Dimensions, D x W x H                                            | 260 x 215 x 101 mm                                                                    |
| Impedance                                                        | 75 Ω                                                                                  |
| Electromagnetic compatibility (EMC)                              | EN 50083-2                                                                            |
| Protection class                                                 | IP66                                                                                  |
| Ambient temperature                                              | -10...+55 °C                                                                          |

## LR 41 X XXXX

|                                  |                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Mechanical Configuration:</b> | 0 - default (WISI version with RPD)                                                                             |
| <b>Diplexer:</b>                 | 0 - default - without<br>1 - XE50B0650 - 65/85 MHz<br>2 - XE50B0850 - 85/108 MHz<br>4 - XE50B2040 - 204/258 MHz |
| <b>Output Ports:</b>             | 1 - R-PHY DS, 1xUS, 1 output (low/high switchable)                                                              |
| <b>Input Power:</b>              | 2 - local powered (230 V AC, EU plug)                                                                           |
| <b>Connector Type:</b>           | L - Input, Monitor, Output LC/APC<br>S - Input, Monitor, Output - SC/APC                                        |