

# FR200-4

## Quad return path optical receiver



The FR200-4 Quad HFC return path receiver can convert upstream optical signals to RF in the Cable TV headend or remote hub. Four independent optical receivers are integrated into a 1RU 19" case. Each optical receiver features a low noise design, with -22dBm receive sensitivity to provide service on even the longest fiber runs. The receivers are temperature hardened and can be operated even in non-air conditioned environments. Typical powering is from 120 VAC, but a UL-Listed version is readily available using a 12 VDC external switching supply.



### Features:

- 4 low noise optical receivers, up to -22dBm receive sensitivity.
- 1200~1620nm band wavelength
- Optional SNMP network management function option
- Temperature hardened, allowing -40~+65°C operating temperature
- Simple mode fiber, 19" 1RU mount, high-density quad optical receiver
- Available with UL-Listed external switching power supply

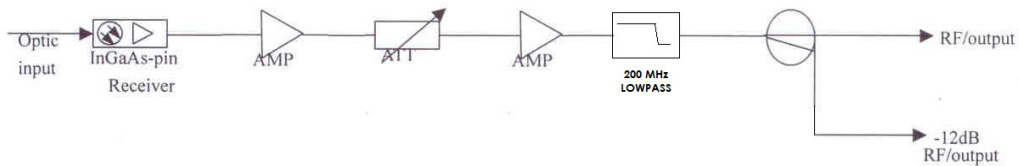
**Quality Fiber and RF Inc**

<http://www.qfrf.com>

(772)545-9757

## TECHNICAL SPECIFICATIONS

| Performance       |                                    |             | Index  |            |      | Supplement          |                     |
|-------------------|------------------------------------|-------------|--------|------------|------|---------------------|---------------------|
|                   |                                    |             | Min.   | Typ.       | Max. |                     |                     |
| Optical feature   | Operating wavelength ( $\lambda$ ) | (nm)        | 1200   |            | 1620 |                     |                     |
|                   | Responsivity                       | R13         | (A/W)  | 0.85       | 0.95 |                     | 1310nm              |
|                   |                                    | R15         |        | 0.85       | 1.0  |                     | 1550nm              |
|                   |                                    | R16         |        |            | 0.85 |                     | 1610nm              |
|                   | Optical link budget loss           |             | (dB)   | 17         |      |                     |                     |
|                   | Receiving power                    | Typical     | (dBm)  | -17        |      | -7                  |                     |
|                   |                                    | Sensitivity |        |            | -23  | -22                 | Pr                  |
|                   |                                    | Overload    |        | 0          | +1   |                     | Po                  |
|                   | Number of optical receiver         |             | (pcs)  | 4          |      |                     |                     |
|                   | Return loss                        |             | (dB)   | 50         |      |                     |                     |
| Optical connector |                                    |             | SC/APC |            |      | LC/APC optional     |                     |
| RF feature        | Operating bandwidth                |             | (MHz)  | 5          |      | 200                 |                     |
|                   | RF output level                    |             | (dBmV) | 30         |      | 60                  |                     |
|                   | RF gain adjustable                 |             | (dB)   | -30        |      | 0                   |                     |
|                   | Flatness                           |             | (dB)   | -0.75      |      | +0.75               |                     |
|                   | Return loss                        |             | (dB)   | 16         |      |                     |                     |
|                   | RF test point/monitor              |             | (dB)   | -20.5      | -20  | -19.5               |                     |
|                   | Noise power ratio (NPR)            |             | (dB)   | 37         |      |                     | F-P, Link loss>15dB |
| 41                |                                    |             |        |            |      | DFB, Link loss>15dB |                     |
| General feature   | Power supply                       | AC          | (V)    | 90         | 120  | 265                 |                     |
|                   |                                    | DC          |        | 11         | 12   | 13                  |                     |
|                   | Power consumption                  |             | (W)    |            |      | 48                  |                     |
|                   | Operating temperature              |             | (°C)   | -40        |      | +65                 |                     |
|                   | Relative humidity                  |             | (%)    | 5          |      | 95                  |                     |
|                   | Size                               |             | (")    | 19×12×1.75 |      |                     | (W)×(D)×(H)         |



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