

L-band Passive Equalisers

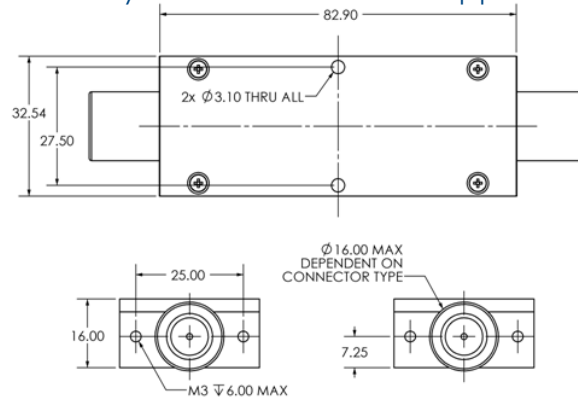
75Ω impedance range



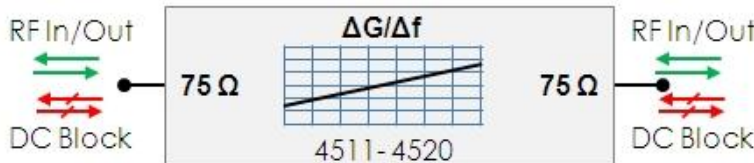
The 4511-4520 series are 75 ohm passive L-band positive slope equalisers available in 1dB slope increments over 1 to 10dB range. These are reciprocal devices with DC block between the two ports.

These components are available with the following RF connector options: 75 Ω SMA, N-type and BNC.

Physical dimensions and appearance



Vector Diagram



Maximum acceptable operating parameters for reliable and safe operation

| Parameter | Value | Comment |
|-----------------------|----------------|-----------------------------|
| Input RF power | +37 dBm (5W) | Max total RF power |
| DC Rating | 28V | All RF ports are DC blocked |
| Operating temperature | 0 to 65 C | Indoor use only |
| Storage Temperature | -20 C to +75 C | |
| Humidity | 90% | Non-condensing |

! Operation beyond these limits may cause instantaneous and permanent damage.



EQU1P-4511 to 4520

L-band Passive Equaliser



Typical performance - L-band passive equalisers

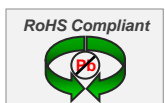
| Model Number | Positive slope (dB) | Slope vs. Frequency variation (dB) | Insertion Loss* (dB) | | Return Loss (dB) | |
|-------------------|---------------------|------------------------------------|----------------------|-----|------------------|-----|
| | | | Typ. | Max | Typ. | Min |
| EQU1P-4511 | | | | | | |
| EQU1P-4511-B7B7 | 1 | ±0.3 | 2.0 | 3.5 | 12 | 8 |
| EQU1P-4511-F7F7 | 1 | ±0.3 | 2.0 | 3.5 | 10 | 6 |
| EQU1P-4512 | | | | | | |
| EQU1P-4512-B7B7 | 2 | ±0.5 | 2.5 | 3.5 | 12 | 8 |
| EQU1P-4512-F7F7 | 2 | ±0.5 | 2.5 | 3.5 | 10 | 6 |
| EQU1P-4513 | | | | | | |
| EQU1P-4513-B7B7 | 3 | ±0.8 | 2.5 | 3.5 | 14 | 8 |
| EQU1P-4513-F7F7 | 3 | ±0.8 | 2.5 | 3.5 | 12 | 8 |
| EQU1P-4514 | | | | | | |
| EQU1P-4514-B7B7 | 4 | ±1.0 | 3.0 | 5.0 | 14 | 8 |
| EQU1P-4514-F7F7 | 4 | ±1.0 | 3.0 | 5.0 | 12 | 8 |
| EQU1P-4515 | | | | | | |
| EQU1P-4515-B7B7 | 5 | ±1.2 | 4.5 | 6.0 | 14 | 8 |
| EQU1P-4515-F7F7 | 5 | ±1.2 | 4.5 | 6.0 | 12 | 8 |
| EQU1P-4516 | | | | | | |
| EQU1P-4516-B7B7 | 6 | ±1.5 | 5.5 | 7.5 | 14 | 8 |
| EQU1P-4516-F7F7 | 6 | ±1.5 | 5.5 | 7.5 | 12 | 8 |

* Mid-band insertion loss



ETL Systems Ltd, Coldwell Radio Station, Madley, Hereford, HR2 9NE, England

ETL Systems design, develop and manufacture specialist equipment for satellite ground stations. For a full description of the ETL product range, please see our website at www.etlsystems.com. This product range provides the basis for meeting your specific demands.



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EQUL1P-4511 to 4520

L-band Passive Equaliser



Typical performance - L-band passive equalisers

| Model Number | Positive slope (dB) | Slope vs. Frequency variation (dB) | Insertion Loss* (dB) | | Return Loss (dB) | |
|--------------|---------------------|------------------------------------|----------------------|-----|------------------|-----|
| | | | Typ. | Max | Typ. | Min |

EQUL1P-4517

| | | | | | | |
|------------------|---|------|-----|-----|----|---|
| EQUL1P-4517-B7B7 | 7 | ±1.5 | 5.0 | 7.0 | 12 | 8 |
| EQUL1P-4517-F7F7 | 7 | ±1.5 | 5.0 | 7.0 | 10 | 8 |

EQUL1P-4518

| | | | | | | |
|------------------|---|------|-----|-----|----|---|
| EQUL1P-4518-B7B7 | 8 | ±1.7 | 5.5 | 8.0 | 12 | 8 |
| EQUL1P-4518-F7F7 | 8 | ±1.7 | 5.5 | 8.0 | 10 | 8 |

EQUL1P-4519

| | | | | | | |
|------------------|---|------|-----|-----|----|---|
| EQUL1P-4519-B7B7 | 9 | ±2.0 | 6.0 | 8.5 | 12 | 8 |
| EQUL1P-4519-F7F7 | 9 | ±2.0 | 6.0 | 8.5 | 10 | 8 |

EQUL1P-4520

| | | | | | | |
|------------------|----|------|-----|-----|----|---|
| EQUL1P-4520-B7B7 | 10 | ±2.0 | 6.0 | 9.0 | 10 | 8 |
| EQUL1P-4520-F7F7 | 10 | ±2.0 | 6.0 | 9.0 | 8 | 8 |

* Mid-band insertion loss

ETL's L-band passive frequency equalisers range

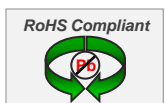
| Model Number | Positive Slope Range | RF Connector Impedance | Other features |
|---------------------|----------------------|------------------------|-------------------|
| EQUL1P-4501 to 4510 | 1 to 10dB | 50Ω | DC block |
| EQUL1P-4511 to 4520 | 1 to 10dB | 75Ω | DC block |
| EQUL1P-4521 to 4530 | 1 to 10dB | 50Ω | DC and 10MHz Pass |
| EQUL1P-4531 to 4540 | 1 to 10dB | 75Ω | DC and 10MHz Pass |

Please note: custom products are available. Please contact us with your enquiry



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