

General

High value communication assets require high reliability equipment. Our MCU1 distribution products are designed to meet demanding requirements and keep on working reliably.

The MCU1 multicoupler (active splitter) units provide a low cost, high performance RF signal distribution solution for a variety of signals up to 5.5GHz. They are available in 1x4, 1x8 and 1x16 configurations. Sometimes switching is not needed, but signals still need to be distributed to various destinations. This product delivers ultra-high signal performance coupled with rugged construction at an affordable price. Unused outputs do not need to be terminated like a typical power divider (splitter).

The unit comes with removable rack mount flanges, but can also has rubber feet for bench-top use. The flanges can be installed four different ways to provide installation flexibility. An optional cable restraint/support bracket can be specified available as well.

When ordering, the user can specify if there is one section or two, the input connector to be SMA, BNC or N-Type, the output connector to be SMA, BNC or N-Type, and the location of the I/O (front or rear).

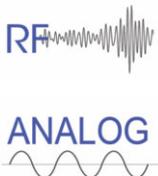
The unit has a single AC power inlet with optional redundant power available (AC or AC/DC). The unit's AC power inlet is designed for any international AC power source, and an optional wide-range DC power input is also available.

Applications

- Ground station, infrastructure or ATE facilities
- Communication installations
- ENG trucks and vans
- Airborne surveillance systems
- Teleport and last mile installations
- Receiver routing for transmit or receive

Features

- High reliability technology
- SMA, BNC and/or N-Type signal connectors
- Connectors at rear, front or both
- Impedance 50
- Designed for ultra reliability
- Rugged aluminum modular 1RU construction
- Configuration 1x4, 1x8 and 1x16
- Dual or Single configurations
- Specific frequencies, or wideband
- Optional gain can be specified
- Redundant power supplies optional (special order)
- International AC power input

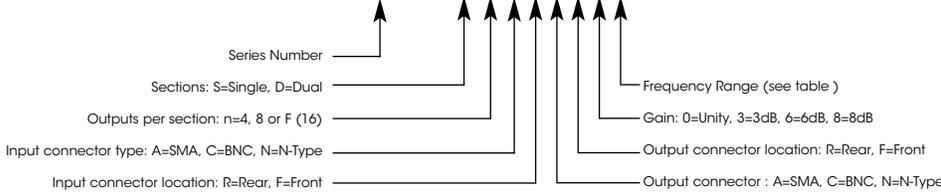


Rear Example
 High performance dual 1x8 multicoupler with N-Type in, and SMA connectors out

Configure Your Unit

When ordering a unit, review the model number definition shown below. Some combinations are not available. The unit is fully assembled, tested and burned in. See frequency definition to the right. If you need assistance, contact your local representative or the factory. **We can also do special configurations to meet your unique needs.**

MCU1-xnciclgf



"r"	Frequency Range
1	1.5MHz to 32MHz
2	20MHz to 250MHz
3	20MHz to 3000MHz
4	350MHz to 5.5GHz
5	850MHz to 2450MHz
6	10kHz to 30MHz

NOTE 1: Add a "-CR" to include a screw-on cable support bracket to help support cables for certain environments.

NOTE 2: Custom features are available like adding manual gain control, front panel AC power switch or even front panel colors. Contact the factory or local sales staff.



Example: MCU1-D8NFA04
Unit has two sections of 1x8, inputs on the front via N-Type connectors, outputs on rear via SMA, unity gain and frequency range "4" (see table above).



Example: MCU1-D8NRA34
Unit has two sections of 1x8, inputs on the rear via N-Type connectors, outputs on front via SMA, +3dB gain and frequency range "4" (see table above).

Specifications

- Sizes 1x4, 1x8 and 1x16
- Type of unit Multicoupler (distribution)
- Architecture Single or Dual Sections
- Signal connector location Rear, front or both
- Impedance 50 ohms
- Noise Figure <8dB (typ)
- Isolation O/O >55dB (typ)
- Crosstalk >80dB (between sections)
- Flatness +/-2dB full range (typ)
- Input VSWR < 2.0 : 1 (typ)
- 1dB compression > -10dBm
- Maximum input +16dBm no damage

NOTE 1: If special or unique performance or features are required, the base model number is used plus a unique 5-digit suffix.

General Specifications

- Power supply section Single (redundant optional with -R suffix)
- Power indicator Illuminated logo on front panel
- Cooling Convection cooled
- AC power requirements 90-264VAC, 47-63Hz, <30 Watts (400Hz opt)
- AC inlet Rear panel
- Optional DC input Available
- Line protection Fuse @ AC inlet (spares included)
- Weight <6lbs
- Size 1.72H x 7.00D x 19.00W (1RU)
- Operating temp 0 to +60C
- Non-operating temp -20 to +85C
- Humidity 0 to 95% (NC @ +25C)
- MTBF >275,000 hours
- Warranty 2 years (extended warranty up to 7 years)
- Certifications CE EN61010

Universal Switching's policy is one of continuous development. Consequently, the company reserves the right to vary from the descriptions and specifications shown in this publication.