

# G41 Repeater Subassembly for 24 Vdc Integrated Platforms with Winch-Up Masts

MPN: RFSA-G41-24-WU

## Description

This is a 4G repeater subassembly that can be installed in an Integrated Platform alongside a 24 Vdc Power System and Winch-Up Mast. The system uses a Cel-Fi G41 repeater, which is designed to be used while stationary. The Low-Band panel antenna provides a beam of coverage typically out to about 400 metres (input signal quality dependent).

It typically forms part of a BOM for a 4G Repeater Trailer or Skid. It contains all components necessary to "bolt-on" inside the electrical enclosure and onto the mast. This subassembly is designed for Winch-Up masts that have coaxial cables pre-installed inside the thermoformed harness.

This subassembly is designed for 24 Vdc power systems, and has a DC-DC converter to step the voltage back to 12 Vdc for the Cel-Fi repeater.

An Isolation Screen should ideally be installed to ensure maximum RF performance.



## Nextivity Cel-Fi GO G41-JE Cellular 4G-5G Stationary Repeater



|                         |                        |                             |           |
|-------------------------|------------------------|-----------------------------|-----------|
| Simultaneous Bands:     | 2                      | Relay Bandwidth:            | 40.00 MHz |
| Downlink Max. Gain:     | 100 dB                 | Uplink Max. Gain:           | 100 dB    |
| Supported Technologies: | 3G UMTS, 4G LTE, 5G NR |                             |           |
| Dimensions:             | 260 × 107 × 63 mm      | Min. Operating Temperature: | 0 °C      |
| Weight:                 | 2 kg                   | Max. Operating Temperature: | 40 °C     |

## Powertec 4G Low Band H-Pol Panel Antenna, 698 to 960 MHz, 4.3-10 Female



|                             |                |                  |                          |
|-----------------------------|----------------|------------------|--------------------------|
| Start Frequency:            | 698 MHz        | Polarisation:    | Horizontal (H)           |
| Stop Frequency:             | 960 MHz        | Input Impedance: | 50                       |
| Max. Input Power:           | 100 W          |                  |                          |
| Subtype:                    | Panel / Sector | Dimensions:      | 500 x 280 x 125          |
| MIMO:                       | 1x1 SISO       | Materials:       | Polyvinyl Chloride (PVC) |
| Min. Operating Temperature: | -40 °C         | Mounting:        | Pole Clamp 30 to 52 mm   |
| Max. Operating Temperature: | 70 °C          | Weight:          | 3 kg                     |

## ZCG Low Band High Gain Yagi Antenna, 700 to 890 MHz, 15 dBi, 4.3-10 Female



|                             |          |                  |                 |
|-----------------------------|----------|------------------|-----------------|
| Start Frequency:            | 698 MHz  | Polarisation:    | Linear          |
| Stop Frequency:             | 890 MHz  | Input Impedance: | 50              |
| Max. Input Power:           | 100 W    |                  |                 |
| Subtype:                    | Yagi     | Dimensions:      | 1550 x 25 x 235 |
| MIMO:                       | 1x1 SISO | Materials:       | Aluminium       |
| Min. Operating Temperature: | -40 °C   | Weight:          | 0.75 kg         |
| Max. Operating Temperature: | 85 °C    |                  |                 |

### Subcomponents

| Quantity | Subcomponent   |
|----------|--|
| 1        | Nextivity Cel-Fi GO G41-JE Cellular 4G-5G Stationary Repeater              |
| 1        | Powertec 4G Low Band H-Pol Panel Antenna, 698 to 960 MHz, 4.3-10 Female    |
| 1        | ZCG Low Band High Gain Yagi Antenna, 700 to 890 MHz, 15 dBi, 4.3-10 Female |
| 1        |  |
| 4        | 4.3-10 Male Connector for L-240 Coaxial Cable                              |
| 1        | PSF-402 Patch Cable 4.3-10 Male to SMA Male 1m                             |
| 1        | PSF-402 Patch cable 4.3-10 Male to SMA Male 50cm                           |
| 1        | Victron Orion-Tr 24/12-5 (60W) DC-DC Converter                             |

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