

# Amplifier-Bypass Unit – GTV1246

## X-Band / Ku-Band (10.7 – 12.75 GHz)



Image for reference only

### TECHNICAL DATA @ 25°C

<b>Type No.</b>	<b>1200272</b>
Number of inputs	1
Number of outputs	1
Architecture	One amplifier path One bypass path Switching: coaxial relay
Frequency range	10.7 – 12.75 GHz
Amplifier path	
Gain (fixed) [dB]	20min., 21 typ., 22 max.
Flatness [dB]	± 0.8 typ., ± 1.2 max.
Noise Figure [dB]	7.5 typ., 8.5 max.
OPIP3 [dBm]	22 min., 24 typ.
VSWR	
Input	1.25:1 typ., 1.35:1 max.
Output	1.3:1 typ., 1.35:1 max.
Input power [dBm] non destructive	+10 max. CW
Outout pwr [dBm] @ 1dB compr.	+16 typ.
Bypass path	
Insertion loss [dB]	3.0 typ., 3.5 max.
VSWR	
Input	1.25:1 typ., 1.35:1 max.
Output	1.3:1 typ., 1.35:1 max.
Input power [dBm] non destructive	+13 CW max.

Relay	
Life	2.5 million cycles
Impedance [Ω]	50
Connectors	
Input	SMA female
Output	SMA female
Local control	Illuminated pushbutton blue LED, front panel
Remote control	---
Power supply	80-264 V AC (47-63 Hz)
Power consumption	<30VA
Temperature range	Indoor use only
Operating	-5 ... +50°C
Storage	-10 ... +60°C
Colour:	Front panel: RAL7021
Attached hardware	Power cord Operating manual
Dimensions (wxhxd)	483mm x 44mm x 360mm (19" drawer, 1U)
Weight	5 kg
Features	
■ Bypass mode: amplifier input and output loaded to 50Ω	
■ Isolator at input and output	



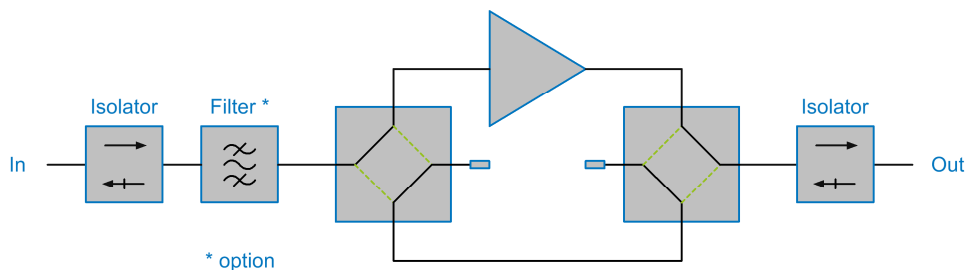
## OPTIONS

The following options are available:

- Redundant power supply
- DC power supply
- Mixed power supply (AC and DC)
- Amplifier monitoring
- Customized filters
- Remote control

## DESCRIPTION

The amplifier bypass unit contains internal switching, allowing the user control of the amplifier to handle both high and low signal levels by bypassing the amplifier in the presence of large signals. Internal bypass switching extends the useable dynamic range.



## APPLICATIONS

The GTV1246 uses a low-noise amplifier and high-end coaxial switching elements and is designed for long-term installations. Its excellent gain flatness and noise figure makes it suitable for the following purposes:

- Satellite communications
- Direct broadcast satellite services
- Military radar applications
- Weather monitoring
- Air traffic control
- Maritime vessel traffic control
- Defence tracking

## ABOUT US

**novotronic** is a Germany-based electronics engineering company. **novotronic** specialises in meeting the needs of government and defence, telecommunication, broadcast and aerospace. We have about 25 years experience producing state of the art technology for your applications.

## OUR SKILLS

**novotronic** develops and manufactures technically sophisticated products. As a **certified aerospace and defence company novotronic** operates a quality management system in accordance with ISO 9001:2015 and EN 9100:2018 (equivalent to AS 9100D and JISQ 9100:2016 including ISO 9001:2015).