



BRANCHING UNIT VHF 4 TX AND 4 RX COMBINER + 2X 4WAYS GNSS RECEIVER + VSWR Meter Arrangement

T06990530-121

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POLOMARCONI offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

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Electrical Specifications

Frequency band (MHz)	154 ÷ 165	
Impedance (Ω)	50	
VSWR (all ports)	$\leq 1.5:1$	
[*] Duplex Spacing (MHz) (between Rx and Tx bandpass center)	4	
Tx - Tx spacing (MHz)	≤ 1.5	
Rx - Rx spacing (MHz)	≤ 1.5	
[**] Max Tx Power (W)	50	
Max Rx CW Incident Power (dBm) without damage	+27	
Max Rx Power working (dBm) in compression mode	+10	
Tx Insertion Loss (dB)	≤ 10	
Rx Gain (dB)	ANT - Rx Out	2 (+0,-1)
Input IP 3rd order (dBm)	≥ 15	
Noise Figure (dB)	ANT - Rx Out	≤ 4.7
Power Supply (V_{DC})	10÷15	
Isolation (dB)	Tx - Tx	≥ 60
	Rx - Rx	≥ 25
	ANT - Tx	≥ 47
	Tx - Rx (in Tx or Rx bandwidth)	750 kHz ≥ 80 1.5 MHz ≥ 73
Current Consumption (mA)	@ 12 V_{DC}	≤ 300

[*] Please specify TX and RX frequencies when ordering
[**] No degradation with 4Tx @ 50W each. No Branching Unit damage in case of fully mismatched Antenna Output with 4Tx @50W CW

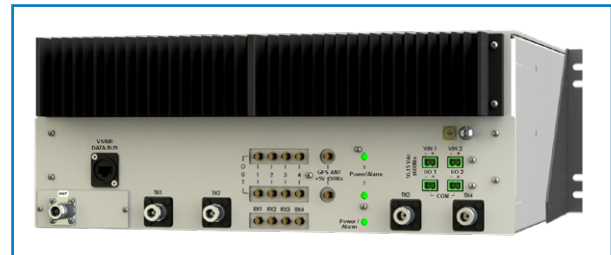
GNSS Receivers

Support GLONASS L1/L2/L3, BeiDou L1, GPS L1/L2/L5 Bands		
[*] Output Supply (V_{DC}) on GNSS Antenna Connectors	+5 (max 50mA)	
VSWR	ANT	$\leq 2.3:1$
	Rx_i	$\leq 1.5:1$
Rx Gain (dB)	4±2	
LNA Noise Figure (dB)	≤ 3.2	
Isolation (dB)	Rx - Rx	≥ 25
	Rx - ANT	≥ 30
Input 1 dB compression point (dBm)	≥ -10	
Outputs	AC coupled	

[*] A condition of Short Circuit on GPS Antenna Input must not influence the other GPS Splitter (if present) nor on the LNA

Mechanical Specifications

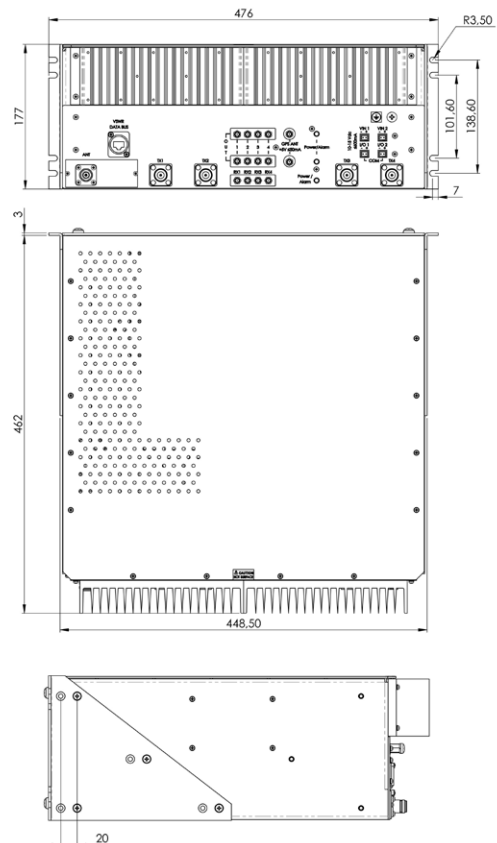
RF Connectors	Tx_i , ANT	5 x Nf
	Rx_i	4x SMAf
	GNSS (ANT, RXi)	10x SMAf
DC Connector	4 x 2-pin PCB Header	
VSWR Data BUS	RJ45	
Dimensions	4U x 19" x 462mm	
Weight (kg)	< 22	
Front Panel Colour	RAL 7031	



Environmental Specifications

Operating Temp. Range (°C)	0 ÷ +50
Storage Temp. Range (°C)	-40 ÷ +70

Dimensions (mm)





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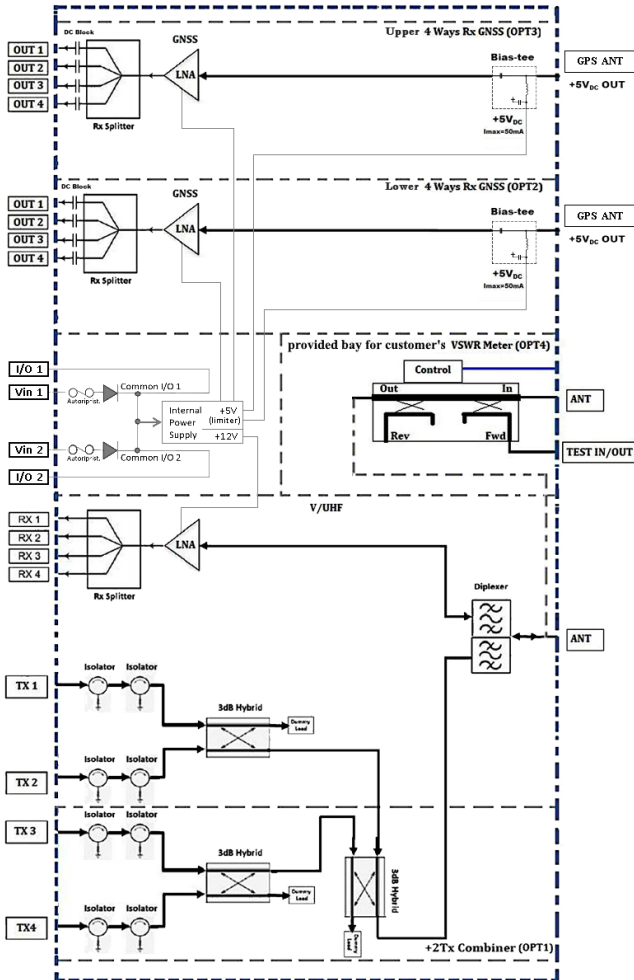
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Electric Schematics



ORDERING CODE

***] T06990530-X Y Z

NUMBER OF TX ←
(default) 0=2Tx
1=4TX

NUMBER OF 4xRX GNSS receivers ←
(default) 0=No GNSS
1=4xGNSS receivers
2=8xGNSS receivers

VSWR Meter Arrangement ←
(default) 0=No
1=Yes

***] T06990530 without suffix is default.
Example code: T06990530-121 "Branching Unit VHF 4 TX and 4 RX Combiner + 2x 4Ways GNSS receiver + VSWR Meter Arrangement"