

Active Antenna Splitter for VHF Radios and AIS Transponders/Receivers with additional FM broadcast output „easySplit_OCB“ (operates Class B)

Part No. A027
Manufacturer: Weatherdock AG, Am Weichselgarten 7, 91058 Erlangen, Germany

Topology:	3-way active antenna splitter
Ports:	<ul style="list-style-type: none"> - port 1: VHF antenna IN/OUT - port 2: VHF IN/OUT (VHF-Radio) - port 3: AIS IN/OUT or OUT (AIS Transponder or Receiver) - port 4: FM-Radio OUT
Port sockets:	<ul style="list-style-type: none"> - port 1: SO239 , 50 Ohm - port 2: SO239 , 50 Ohm - port 3: BNC, isolated, 50 Ohm - port 4: BNC, isolated, 50 Ohm
Frequency bands and signal transfer:	<p><u>VHF radio operation: port 1 to port 2:</u></p> <ul style="list-style-type: none"> - frequency: 150 to 165 MHz - VHF radio receiving: <ul style="list-style-type: none"> - transfer: > -4dB (> -3.8 dB typical) - VHF radio ON AIR <ul style="list-style-type: none"> - power loss < 1 dB (< 0.8 dB typical) <p><u>AIS operation: port 1 to port 3:</u></p> <ul style="list-style-type: none"> - frequency: 160 to 165 MHz - VHF radio receiving, AIS Transponder receiving: <ul style="list-style-type: none"> - transfer: > - 4 dB (> - 3.8 dB typical) - VHF radio receiving, AIS transponder ON AIR: <ul style="list-style-type: none"> - transfer: < - 1dB (-0.8dB typical) - VHF radio ON AIR, AIS transponder receiving/ON AIR: <ul style="list-style-type: none"> - transfer: < -30 dB (path decoupled) <p><u>FM Radio operation: port 1 to port 4:</u></p> <ul style="list-style-type: none"> - frequency: 88 to 108 MHz - VHF radio receiving: <ul style="list-style-type: none"> - gain: >= 12 dB - VHF radio ON AIR: <ul style="list-style-type: none"> - transfer: < - 30 dB (path decoupled)

Power Handling:	<u>VHF Radio:</u> - Maximum transmit power: 30W - Minimum transmit power: 400mW <u>AIS Transponder:</u> - Maximum transmit power: 3W - Minimum transmit power: 500mW
Attack time:	<u>VHF Radio:</u> < 10msec (typ. < 7msec), after ramp-up of RF Power (direct connection VHF radio to antenna and decoupling of all other devices) <u>AIS Transponder:</u> < 60µsec (typ. 20µsec) after ramp-up of RF Power (direct connection transponder to antenna and decoupling of all other devices)
Power supply:	- Operating Voltage: + 9 to + 28V - Operating Current: < 160mA - Polarity protection - Power supply is decoupled from Ship's Ground
Fuse:	built-in, self healing fuse, 500mA
power socket/cable:	- <u>socket:</u> - pin 1: battery plus - pin 2: battery minus - <u>cable:</u> - red: battery plus - black: battery minus
User Interface:	- LED indicator for Power ON: green - LED indicator for VHF ON AIR: yellow - LED indicator for AIS Transponder ON AIR: yellow (LED shines only during AIS transmission)
Temperature range:	for use under deck, 0°C to 60°C
Mechanical data:	- overall size: 165 x 165 x 35 mm - weight: approx. 560gr net, approx. 900gr including packing
Approvals:	- CE/EN60945-2002 - FCC CFR47 part 15, sections 15.107 and 15.109 (Class B)

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Sketch:

