

DC311: Directional Coupler 5.8 GHz for R-58 Waveguide

General Description

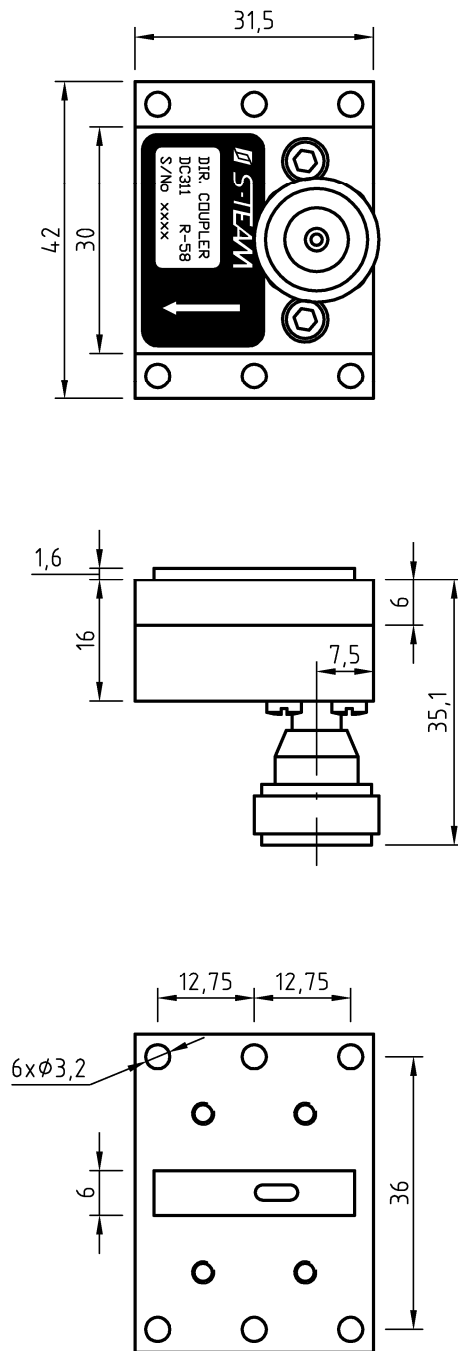
DC311 is a miniature directional coupler intended for sampling incident or reflected waves in high-power 5.8 GHz industrial applications using R-58 (WR-159) rectangular waveguide. The coupler is fixed to the waveguide with six M3 or similar-diameter screws after machining of appropriate holes in the broad waveguide wall. Simple reversing the coupler causes it to sample the wave propagating in the opposite direction.



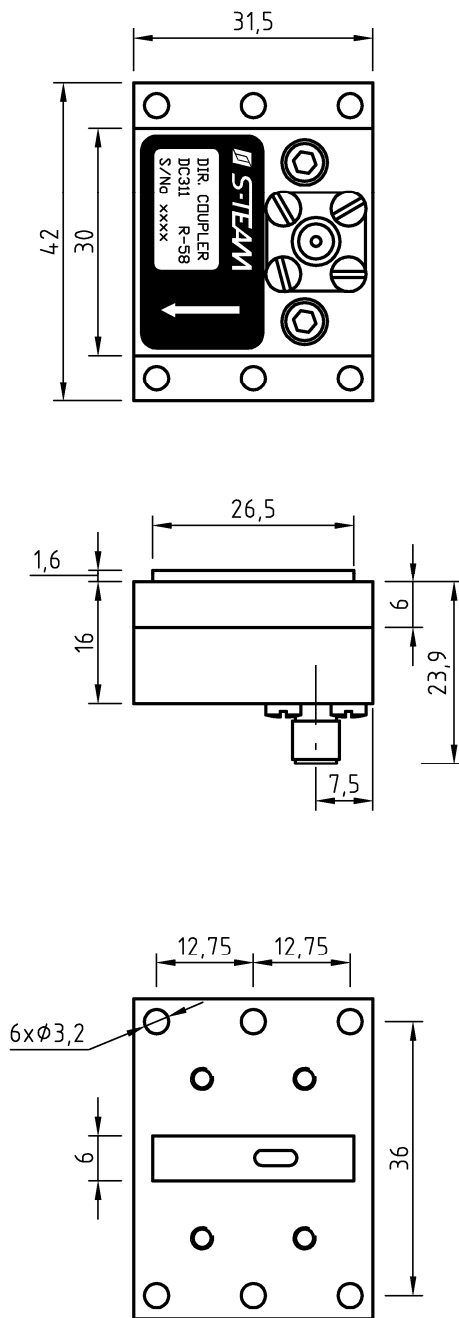
Specifications

Frequency range	5.7 ÷ 5.9 GHz
Coupling factor	-60 dB ±1 dB standard -50 dB ±1dB available on special order -70 dB ±1dB available on special order
Directivity	25 dB min
Output connector	N-F (SMA-F available upon request)
VSWR (N, SMA)	1.6 max
Waveguide of destination	R-58 (40.39 mm x 20.19 mm, wall thickness 1.6 mm)
Operating temperature range	-40 °C ÷ 80 °C

Dimensional Drawing - N type connector (all dimensions in millimeters)



Dimensional Drawing - SMA type connector (all dimensions in millimeters)



Waveguide Machining Template (all dimensions in millimeters)

