

Product Brief

26 GHz RF Downconverter

The SC5318A is a C to K band single-stage downconverter, converting frequencies from 6 to 26.5 GHz down to DC to 3 GHz. The LO frequency range is from 6 to 26.5 GHz with an input LO range from 6 to 14 GHz. An internal frequency doubler multiplies the input LO range up to 26.5 GHz. This module also features an internal 26.5 GHz synthesized LO, RF preamplifier, and variable gain control making it a compact standalone downconverter module. With the option for an external LO signal, the SC5318A may be configured for SISO applications or paired together for MIMO applications such as ground-based satellite communications, point-to-point radio, and test instrument systems.



The SC5318A can be combined with SignalCore's SC5308A to form a broadband 100kHz to 26.5 GHz downconverter. These high-performance converter modules are compact and rugged, built for easy integration into larger systems.

Full implementation instructions, GUI, driver software, and example code are provided with each module.

Specification Highlights

Input RF Range	6 GHz to 26.5 GHz
Gain Control	-40 to +35 dB
LO Phase Noise	-100 dBc/Hz @ 10 kHz, 10 GHz
Input IP3	+18 dBm
Noise Figure	+6 dB @ max gain

Applications

- Satellite Communications
- Point-to-Point Radio
- Test Systems
- Prototype Development



SignalCore Headquarters
13401 Pond Springs Road, Austin, TX 78729, USA
P: 512 501 6000 F: 512 501 6001 | www.signalcore.com