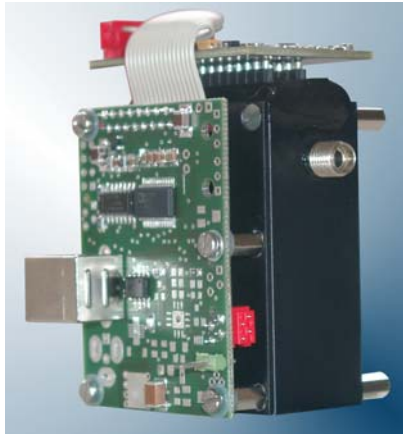




# OEM Spectrometer Broadband Spectra to Digital Converter 250 - 1000 nm

The **JETI broadband spectraprocessor SDC-BB** combines an **integrated flat field spectrograph** with a **powerful processing electronics**.



## Applications

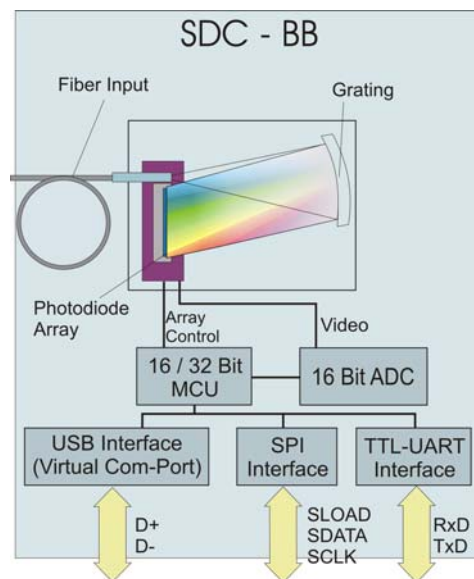
- mobile spectrometric measurement equipment
- colorimeter
- spectroradiometer
- analytical instrumentation
- multichannel spectrometric systems

## Interfaces

- USB
- SPI
- TTL UART

## Description

- internal storage of wavelength pixel relation
- storage of reference data
- preprocessing of data, dark signal correction, absolute calibration
- internal calculations like averaging, interpolation, transmission, reflexion, absorption, color-coordinates
- SCPI compatible control syntax



block diagram

## Specifications

Applications	Single and multichannel spectral measurement
<b>Optical parameters</b>	
Spectral range	250 nm ... 1000 nm
Optical bandwidth	4.5 nm FWHM (50µm slit)
Optical input	SMA connector
Wavelength accuracy	± 0.5 nm (HgAr linesource)
Wavelength reproducibility	± 0.1 nm (HgAr linesource)
Stray light	< 0.2% (ASTM E387, GG495, 4 mm, λ = 420 nm/ 600 nm)
Spectrometer	grating: holographic, flat field detector: photodiode array
<b>Electronical parameters</b>	
Digital resolution	14, 15 or 16 bit
Integration time	4 ... 65353 ms
Interfaces	USB SPI TTL UART
Power supply	9V DC, 100mA (if USB is not used)
<b>Mechanical parameters</b>	
Dimensions	approx. 60 x 40 x 35
Weight	approx. 150 g

### Advantages

- easy to implement in customer specific designs
- processing of spectral calculations
- easy multichannel arrangement

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