Product Leaflet

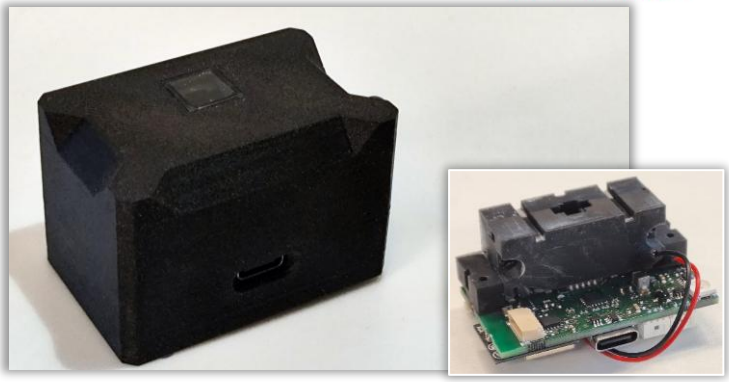
Nibble™ R 2.0

ChipSense™ Evaluation Device

Spectral sensing module, including
- Nibble PCBA 2.0
- Hyperspectral Sensor ChipSense™ 2.x
- Electronics
- Light source and optics

Available in various wavelength range configurations
Also available without housing

Compatible with SpectraByte™ (Desktop app) and SpectraWeb™ (Browser app)



Parameter	Unit	Specifications
Nibble PCBA version		2.0 Final
Typical use case/application		Solid materials hyperspectral fingerprint data collection
Certifications		CE/FCC (see Remark 1)
Optical Sensing Mode		Reflection
Product Assembly Configurations		Complete, Without Housing
ChipSenseTM product on-board		2.1-16
Wavelength range configuration options		VIS/NIR/NIR-BP/ SWIR/Full Range
Wavelength range configuration VIS	nm	500 - 950
Wavelength range configuration NIR	nm	850 - 1700
Wavelength range configuration NIR-BP	nm	850-1100
Wavelength range configuration SWIR	nm	1100 - 1700
Wavelength range configuration Full Range	nm	550 - 1700
Light Source Type		Tungsten-based filament
Light Source max power consumption	W	0.575
Light Source dimmable		yes, 64 levels
Light Source lifetime	h	40.000
Light Source Operation Mode		Current driven, Continuous/Triggered
Signal acquisition method		Sequential
Acquisition Time per Channel Range	ms	0.5-192
Signal to Noise ratio (White ref. sample)	dB	70
Measurement area	mm	5x4
Max working distance	mm	2
On-Device User Interface		na
Wired Connectivity		USB-C / 6 pole SH
USB-C Protocol		USB serial port (115.2 kbps to 921.6 kbps)
6 pole SH protocol		Default: RS485 (115.2 kbps) HW enabled: UART (115.2 kbps up to 921.6 kbps)
Wireless Connectivity		Wi-Fi (2.4 GHz)
Power supply		DC (USB) or External Battery
Voltage Supply	V	3.7 - 5.1
Current Consumption Stand-by	mA	60 (Radio Disabled) 130(Radio Enabled)
Current Consumption Light Source on at Max Power	mA	290
Size (l x w x h)	mm	53x34x32
Recommended Operating Temperature	°C	10 - 40
Operating temperature	°C	0 - 50
Accessories delivered in package		USB-C Cable
Software companion		SpectraByte, SpectraWeb, FW update tool
Remarks		1 - WiFi not certified CE/FCC

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