

Selection Guide and Price List for Fraunhofer ISE Reference Cells



WPVS Reference Cell



Outdoor Reference Cell

Price List for Indoor Reference Cells (WPVS)

Application	Type of Cell	Filtering	Order Number	Price (€) incl. Calibration
Monocrystalline Si (IR-ext, p.a. PERC)	WPVS (N-type A+)	Broadband	510311302.00	3,900.00
Monocrystalline Si	WPVS (N-type A)	Broadband	510311102.00	3,700.00
Polycrystalline Si	WPVS (N-type B)	Broadband	510311202.00	3,700.00
Thin-film	WPVS (P-type C)	KG2	510310309.00	3,700.00
Thin-film	WPVS (P-type C)	KG3	510310303.00	3,700.00
Thin-film	WPVS (P-type C)	KG5	510310304.00	3,700.00
Thin-film	WPVS (P-type C)	BG38	510310305.00	3,700.00
Thin-film	WPVS (N-type A)	OG590	510311107.00	3,700.00
Thin-film/Tandem	WPVS (N-type A)	RG695	510311108.00	3,700.00
Thin-film/Tandem	(N-type A+)	RG780	510311313.00	3,900.00

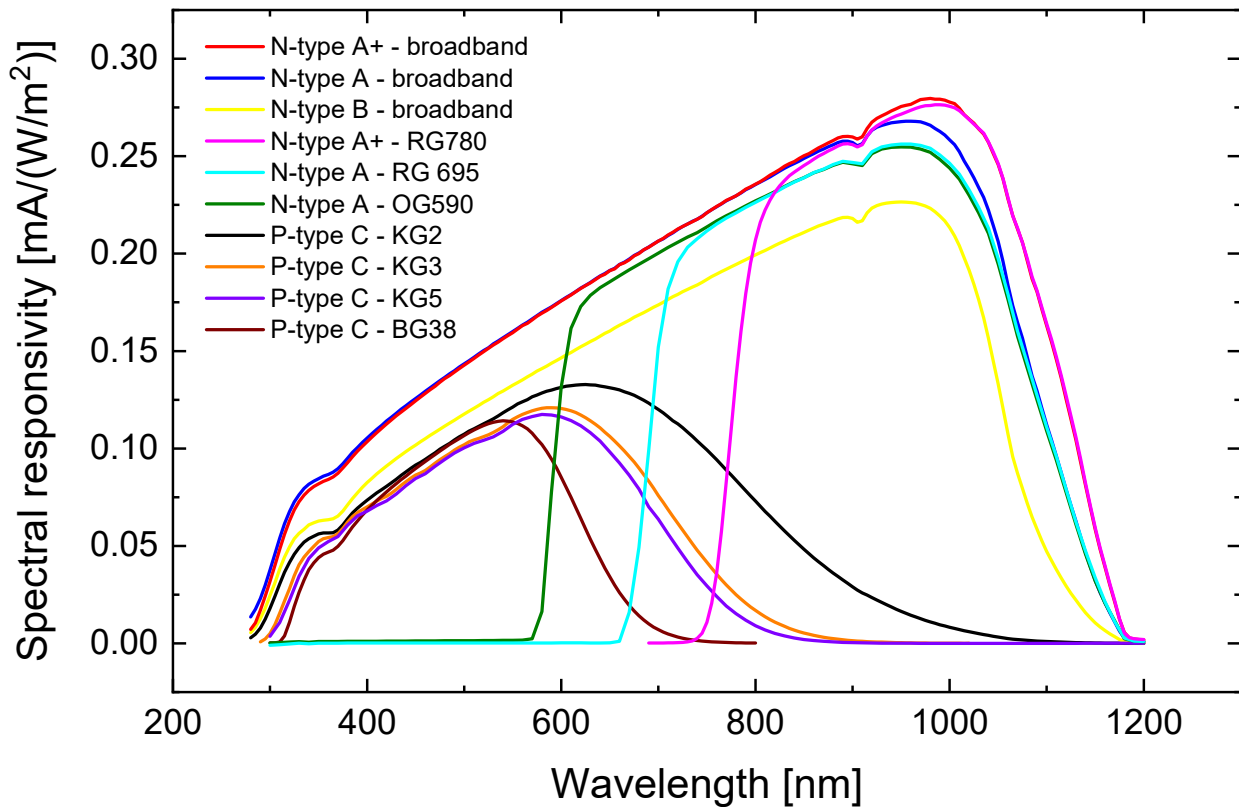
Further filterings on request.

Two LEMO plug connectors for the assembly with the customer's cables included.

For further questions or orders please contact referencecells@callab.de.



Spectral Responses of different Cell / Filter Combinations



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Monocrystalline Si (IR-ext., p.a. PERC)	N-type A+	Broadband	511311302.00	3,900.00
Monocrystalline Si	N-type A	Broadband	511311102.00	3,700.00
Polycrystalline Si	N-type B	Broadband	511311202.00	3,700.00
Thin-film	P-type C	KG3	511310303.00	3,700.00
Thin-film	P-type C	KG5	511310304.00	3,700.00

Plug connector with 2m cable included.

Cable (8-pole) with connector for outdoor reference cells

Length	Order Number	Surcharge (€)
5m	916725108.00	35.00
10m	916728108.00	63.00



Current to Voltage Converter



Voltage Signal Amplifier

Price List for Current to Voltage Converter and Signal Amplifier

Device	Type	Application	Order number	Price (€)
Reference cell current-voltage converter	TIV-ID01	Signal conditioning of indoor reference cells	032011200.00	836.00
Reference cell signal (pre)amplifier	VV-OD01	Voltage signal conditioning of outdoor reference cells <i>with</i> integrated shunt resistor	032011100.00	780.00

The stated prices include a **Fraunhofer ISE proprietary calibration**. **DAkKS calibration** is available at an extra charge of 180.00 €.

The above-mentioned devices are used to connect our reference cells to existing data acquisition systems. With the current-voltage converter it is possible to operate a WPVS reference cell at I_{sc} and measure a DC voltage that is equivalent to the short-circuit current in continuous light measurements. The preamplifier is used to condition the output voltage of outdoor reference cells to the lower input sensitivity of a given data acquisition system.

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