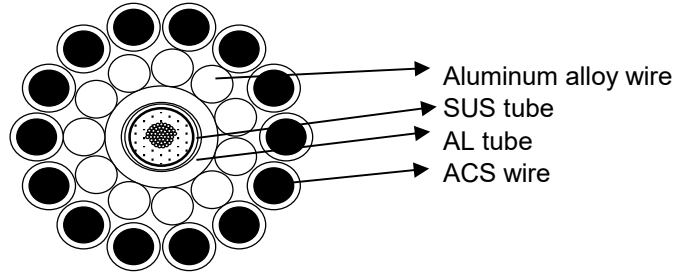


**1. Complete OPGW**
**OPGW-48B1-170[144;244.3] - HCA504509PWC**

Cross Section :



		Named	No.	Diameter	
<b>Structure Details</b>	Center	Aluminum Tube	1	6.50	mm
		SUS-Tube	1	4.20	mm
	Layer 1	AA wire(LHA1)	11	2.40	mm
		20.3%AS wire	12	3.05	mm
		40%AS wire	2	3.05	mm

<b>Technical Data</b>	According to IEEE std 1138、IEC 60794-4 standards	
	Stranding direction of outer layer is "Right-hand"	
	Fibre No. & Type	48 G.652
	Standard Diameter	17.40 mm
	Supporting Cross Section	170.03 mm <sup>2</sup>
	Section of AS wire	102.29 mm <sup>2</sup>
	Section of AA wire	49.76
	Section of Optical unit	17.98 mm <sup>2</sup>
	Approximate mass	878.1 kg/km
	Ultimate Tensile Strength	143.6 kN
	Rated Tensile Strength	129.2 kN
	Maximum Allowable Tension(40%RTS)	304.0 N/mm <sup>2</sup>
	Everyday Stress(20%RTS)	152.0 N/mm <sup>2</sup>
	Strain Margin Stress(60%RTS)	456.0 N/mm <sup>2</sup>
	Modulus of Elasticity	118.0 GPa
	Thermal Elongation Coefficient	15.3 ×10 <sup>-6</sup> /
	Calculated D.C. Resistance at 20℃	0.288 Ω/km
	Short-Circuit Current (1 sec, 20~200 )	15.6 kA
	Short-Circuit Current Capacity (20~200 )	244.3 kA <sup>2</sup> ·s
	Minimum Bending Radius	348 mm
Ratio between Pull and Weight	16.68 km	
<b>Temperature Range:</b>	Installation	-10 ~+50 ℃
	Transportation and Operation	-40 ~+80 ℃

Remarks: All Sizes and Values are Nominal Values



**TECHNICAL DATA SHEET**  
**HENGTONG CABLE AUSTRALIA**  
**OPGW-48B1-170[144;244.3] - PWC**

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Date:

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**2. Fiber Parameters**

Item	G.652D	
Max. attenuation* (Completed OPGW)	(1310nm)	≤0.36dB/km
	(1550nm)	≤0.21dB/km
Mode field diameter	(1310nm)	9.2±0.4μm
	(1550nm)	10.4±0.5μm
Cable cut-off wavelength	≤1260nm	
Cladding diameter	125±0.7 μm	
Core-Cladding concentricity Error	≤0.6μm	
Cladding non-circularity	≤0.7%	
Coating diameter	245±5μm	
Cladding-Coating concentricity error	≤12 μm	
Polarization Mode Dispersion ( PMD )	≤0.2 ps/(km) <sup>0.5</sup>	
Zero dispersion wavelength	1300~1324nm	
Zero dispersion slope	≤0.092ps/nm <sup>2</sup> km	
Dispersion @1288nm~1339nm	≤3.5ps/(nm.km)	
Dispersion @1271nm~1360nm	≤5.3ps/(nm.km)	
Dispersion @1550nm	≤18ps/(nm.km)	
Dispersion @1625nm	≤22ps/(nm.km)	
Proof Test Level	≥0.69GPa	

**3. Fiber identification**

Fiber coloring code: IEC 60304, ANSI/EIA 359-A,598-A

Fiber No.	1	2	3	4	5
Colour	Blue	Orange	Green	Brown	Gray
Fiber No.	6	7	8	9	10
Colour	White	Red	Clear	Yellow	Purple
Fiber No.	11	12	13	14	15
Colour	Pink	Aqua	Blue*1	Orange*1	Green*1
Fiber No.	16	17	18	19	20
Colour	Brown*1	Gray*1	White*1	Red*1	Clear*1
Fiber No.	21	22	23	24	25
Colour	Yellow*1	Purple*1	Pink*1	Aqua*1	Blue*2
Fiber No.	26	27	28	29	30
Colour	Orange*2	Green*2	Brown*2	Gray*2	White*2
Fiber No.	31	32	33	34	35
Colour	Red*2	Clear*2	Yellow*2	Purple*2	Pink*2
Fiber No.	36	37	38	39	40
Colour	Aqua*2	Blue*1	Orange*1	Green*1	Brown*1
Fiber No.	41	42	43	44	45
Colour	Gray*1	White*1	Red*1	Clear*1	Yellow*1
Fiber No.	46	47	48		
Colour	Purple*1	Pink*1	Aqua*1		

Remarks:      Fibres 1-12: Blue bundle  
                     Fibres 13 – 24: Orange bundle  
                     Fibres 25 – 36: Green bundle  
                     Fibres 37 – 48: Brown bundle