

## FY520

### Outdoor Use, Low Loss, Phase Stable

**Features:**

- \* Low Insertion Loss
- \* High Weatherability
- \* UV Resistant

**Applications:**

- \* Wireless Base Station
- \* Satellite Communication
- \* Maritime Communication
- \* Outdoor Interconnection

**Electrical**

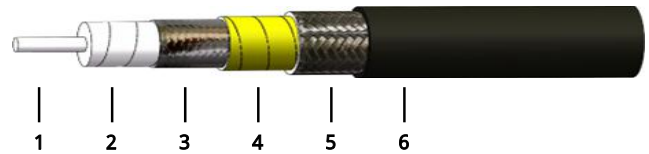
Frequency:	DC~18GHz
Cut-off Frequency:	35GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	70dB min.
Voltage Withstand:	1000V DC

**Mechanical**

Bend Radius (installation):	30.0mm
Bend Radius (repeated):	60.0mm
Weight:	70g/m

**Environmental**

Temperature:	-55~+85°C
Outdoor Life:	20 years

**Construction**


No.	Name	Size (mm)	Material
1	Inner Conductor	1.29	Silver-plated copper
2	Dielectric	3.91	Low density PTFE
3	Inner Shield	4.15	Silver-plated copper tape
4	Interlayer	4.28	Aluminum tape
5	Outer Shield	4.79	Silver-plated copper braid
6	Jacket	6.00	PUR

**Attenuation & Power Handling**

Frequency (GHz)	0.1	0.3	0.5	1	3	6	10	12.4	18
Attenuation*1 (dB/100m)	8.6	15.0	19.4	27.7	48.7	69.9	91.5	102.7	125.5
Average Power*2 (W)	843	484	374	263	149	104	79	71	58

[1] VSWR:1.0; Ambient: +25°C (77°F)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculate Cable Attenuation: Attenuation (dB/100m) =  $0.856234 * \sqrt{F} \text{ (MHz)} + 0.000591 * F \text{ (MHz)}$

Calculate Connector Attenuation: Attenuation (dB) =  $0.03 * \sqrt{F} \text{ (GHz)}$

**How To Order**
**FY520-X-Y-Z**

X: Frequency in GHz

Y: Connector type

Z: Length in meters

**Examples:**

To order a FY520 cable assembly, DC-18GHz, N male to SMA female, 1.5 meters, specify FY520-18-SFN-1.5.

**Connector naming rules:**

S - SMA (18GHz, VSWR 1.25)

N - N (18GHz, VSWR 1.25)

T - TNC (18GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)