

## CELLite® Fixed Tilt Antennas

**Polarization:** Vertical

**Electrical Downtilt:** Fixed

**Horizontal beamwidth:** 65° or 90°

### Applications

This well-known range of fixed tilt antennas are vertically polarized for space diversity with an option of 65° or 90 degree horizontal beamwidths for use in the following cellular standards:

GSM1800 (1710-1785, 1805-1880MHz)

PCS1900 (1850-1910, 1930-1990MHz)

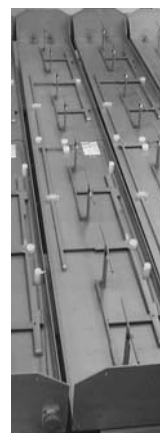
Due to its monolithic mechanical design these highly reliable antennas are IM3 free with extremely stable ageing. CELLite antennas are available in a variety of gain options varying from 16.0 to 17.5 dBi with electrical tilt and mechanical downtilt mount options. These antennas are covered by a UV resistant fiberglass radome and have one 7-16 connectors mounted at the bottom. They are all designed for use with our new APM40 Global Mount system / APM70-3C cluster kit.

### Features & Benefits

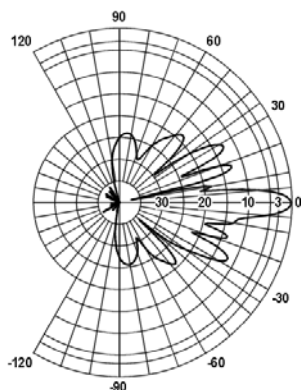
- High gain
- Stable horizontal and vertical beamwidths
- Optimized null fill
- Good Front-to-Back ratio
- Fast horizontal pattern roll-off
- Efficient Co-site interference reduction
- Broadband bandwidth allowing installation on all cellular standards (AP18 Series)
- Very low visual impact
- Low wind load



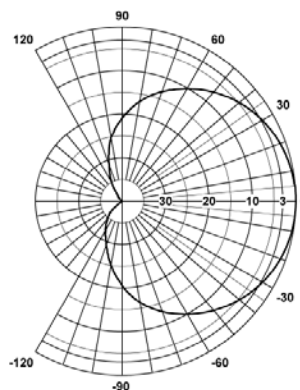
AP18 & AP19 Series



### Typical Patterns



Vertical Pattern



Horizontal Pattern

## CELLite® Fixed Tilt Antennas

### AP186516-CT0

**Horizontal Beamwidth, deg** 65

**Gain, dBi** 17

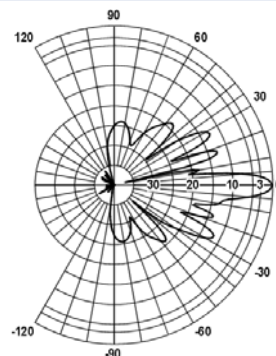
**Electrical Downtilt, deg** 0

#### ELECTRICAL SPECIFICATIONS

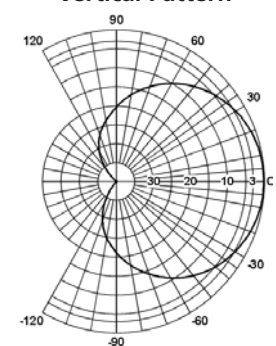
Frequency Range, MHz	1710-1880
Horizontal Beamwidth, deg	65
Vertical Beamwidth, deg	7.5
Gain, dBi (dBd)	17 (14.9)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	35 (typical 40)
VSWR	< 1.3:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1310 x 198 x 50 (51.55 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	160 (100)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.26 (2.78)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	422 (95)
Front Thrust @ Rated Wind, N (lbf)	422 (95)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	4.7 (10.34)
Packing Dimensions - HxWxD, m (ft)	1.4 x 0.3 x 0.17 (4.62 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1410 x 300 x 170 (55.48 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

### AP186516-CT2

**Horizontal Beamwidth, deg** 65

**Gain, dBi** 17

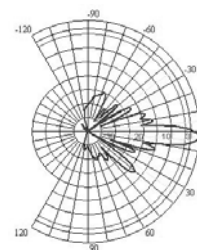
**Electrical Downtilt, deg** 2

#### ELECTRICAL SPECIFICATIONS

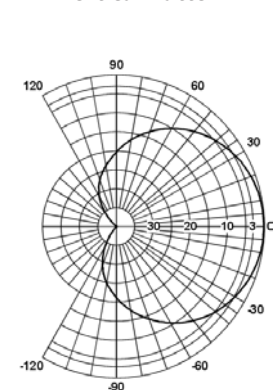
Frequency Range, MHz	1710-1880
Horizontal Beamwidth, deg	65
Vertical Beamwidth, deg	7.5
Gain, dBi (dBd)	17 (14.9)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	35 (typical 40)
VSWR	< 1.3:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1310 x 198 x 50 (51.55 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	160 (100)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.26 (2.78)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	422 (95)
Front Thrust @ Rated Wind, N (lbf)	422 (95)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	4.7 (10.34)
Packing Dimensions - HxWxD, m (ft)	1.4 x 0.3 x 0.17 (4.62 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1410 x 300 x 170 (55.48 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

## CELLite® Fixed Tilt Antennas

### AP189014-CT0

**Horizontal Beamwidth, deg** 90

**Gain, dBi** 16.1

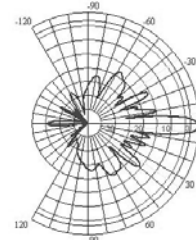
**Electrical Downtilt, deg** 0

#### ELECTRICAL SPECIFICATIONS

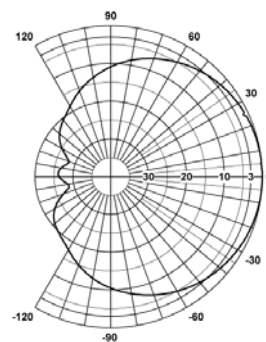
Frequency Range, MHz	1710-1880
Horizontal Beamwidth, deg	90
Vertical Beamwidth, deg	7.5
Gain, dBi (dBd)	16.1 (14)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	> 25
VSWR	< 1.3:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1310 x 198 x 50 (51.55 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.26 (2.78)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	422 (95)
Front Thrust @ Rated Wind, N (lbf)	422 (95)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	4.2 (9.24)
Packing Dimensions - HxWxD, m (ft)	1.4 x 0.3 x 0.17 (4.62 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1410 x 300 x 170 (55.48 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

### AP189016-CT0

**Horizontal Beamwidth, deg** 90

**Gain, dBi** 18

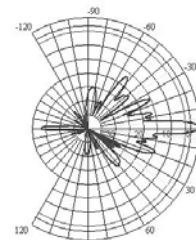
**Electrical Downtilt, deg** 0

#### ELECTRICAL SPECIFICATIONS

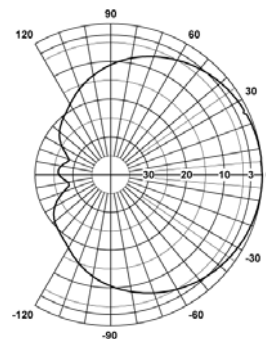
Frequency Range, MHz	1710-1880
Horizontal Beamwidth, deg	90
Vertical Beamwidth, deg	5.5
Gain, dBi (dBd)	18 (15.9)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	> 25
VSWR	< 1.3:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1855 x 198 x 50 (72.99 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.37 (3.93)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	595 (133)
Front Thrust @ Rated Wind, N (lbf)	595 (133)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	6 (13.2)
Packing Dimensions - HxWxD, m (ft)	1.9 x 0.3 x 0.17 (6.27 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1960 x 300 x 170 (77.13 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

# AP18\* & AP19\* Series

1710-1990 MHz

## CELLite® Fixed Tilt Antennas

### AP189016-CT2

**Horizontal Beamwidth, deg** 90

**Gain, dBi** 18

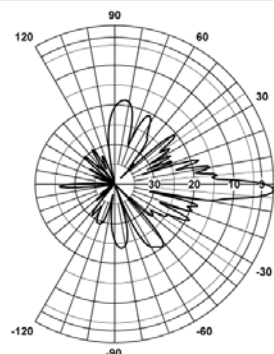
**Electrical Downtilt, deg** 2

#### ELECTRICAL SPECIFICATIONS

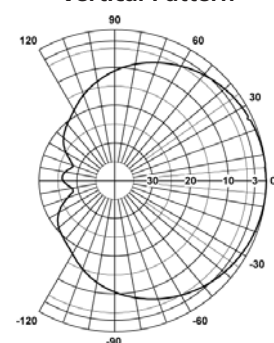
Frequency Range, MHz	1710-1880
Horizontal Beamwidth, deg	90
Vertical Beamwidth, deg	5.5
Gain, dBi (dBd)	18 (15.9)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	> 25
VSWR	< 1.3:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1855 x 198 x 50 (72.99 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.37 (3.93)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	595 (133)
Front Thrust @ Rated Wind, N (lbf)	595 (133)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	6 (13.2)
Packing Dimensions - HxWxD, m (ft)	1.9 x 0.3 x 0.17 (6.27 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1960 x 300 x 170 (77.13 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

### AP196516-CT0

**Horizontal Beamwidth, deg** 65

**Gain, dBi** 17.5

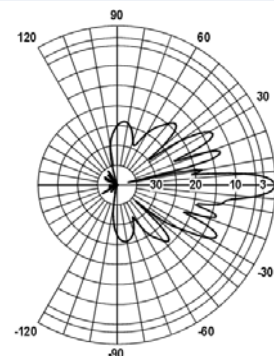
**Electrical Downtilt, deg** 0

#### ELECTRICAL SPECIFICATIONS

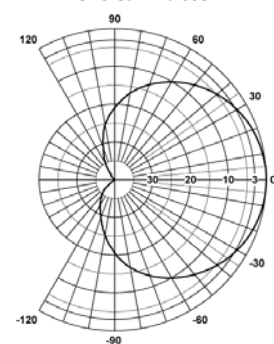
Frequency Range, MHz	1850-1990
Horizontal Beamwidth, deg	65
Vertical Beamwidth, deg	7
Gain, dBi (dBd)	17.5 (15.4)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	35 (typical 40)
VSWR	< 1.5:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1310 x 198 x 50 (51.55 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.26 (2.78)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	422 (95)
Front Thrust @ Rated Wind, N (lbf)	422 (95)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	4.7 (10.34)
Packing Dimensions - HxWxD, m (ft)	1.4 x 0.3 x 0.17 (4.62 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1410 x 300 x 170 (55.48 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

## CELLite® Fixed Tilt Antennas

### AP196516-CT2

**Horizontal Beamwidth, deg 65**

**Gain, dBi 17.5**

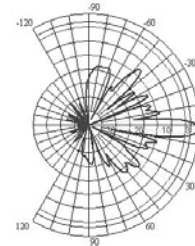
**Electrical Downtilt, deg 2**

#### ELECTRICAL SPECIFICATIONS

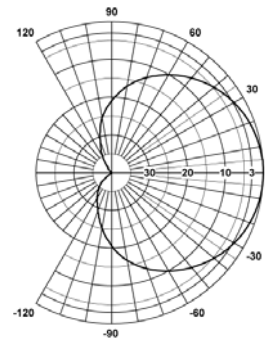
Frequency Range, MHz	1850-1990
Horizontal Beamwidth, deg	65
Vertical Beamwidth, deg	7
Gain, dBi (dBd)	17.5 (15.4)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	35 (typical 40)
VSWR	< 1.5:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1310 x 198 x 50 (51.55 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.26 (2.78)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	422 (95)
Front Thrust @ Rated Wind, N (lbf)	422 (95)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	4.7 (10.34)
Packing Dimensions - HxWxD, m (ft)	1.4 x 0.3 x 0.17 (4.62 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1410 x 300 x 170 (55.48 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

### AP199014-CT0

**Horizontal Beamwidth, deg 90**

**Gain, dBi 15.6**

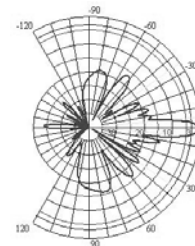
**Electrical Downtilt, deg 0**

#### ELECTRICAL SPECIFICATIONS

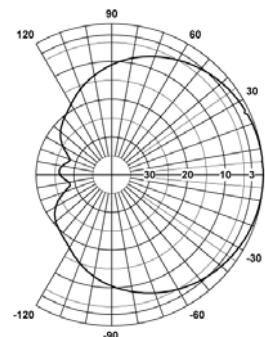
Frequency Range, MHz	1850-1990
Horizontal Beamwidth, deg	90
Vertical Beamwidth, deg	7.5
Gain, dBi (dBd)	15.6 (13.5)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	> 25
VSWR	< 1.5:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1310 x 198 x 50 (51.55 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.26 (2.78)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	422 (95)
Front Thrust @ Rated Wind, N (lbf)	422 (95)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	4.2 (9.24)
Packing Dimensions - HxWxD, m (ft)	1.4 x 0.3 x 0.17 (4.62 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1410 x 300 x 170 (55.48 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern



## CELLite® Fixed Tilt Antennas

### AP199016-CT0

**Horizontal Beamwidth, deg** 90

**Gain, dBi** 17.5

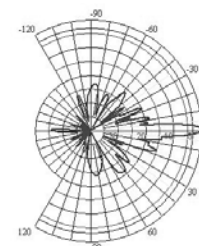
**Electrical Downtilt, deg** 0

#### ELECTRICAL SPECIFICATIONS

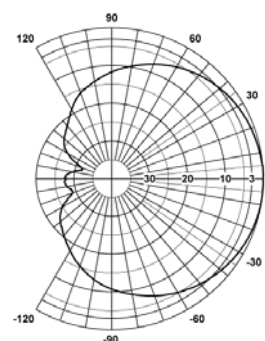
Frequency Range, MHz	1850-1990
Horizontal Beamwidth, deg	90
Vertical Beamwidth, deg	5
Gain, dBi (dBd)	17.5 (15.4)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	30
VSWR	< 1.3:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1855 x 198 x 50 (72.99 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.37 (3.93)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	595 (133)
Front Thrust @ Rated Wind, N (lbf)	595 (133)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	6 (13.2)
Packing Dimensions - HxWxD, m (ft)	1.9 x 0.3 x 0.17 (6.27 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1960 x 300 x 170 (77.13 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern

### AP199016-CT2

**Horizontal Beamwidth, deg** 90

**Gain, dBi** 17.5

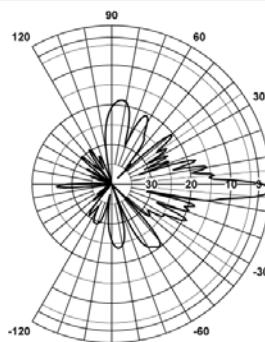
**Electrical Downtilt, deg** 2

#### ELECTRICAL SPECIFICATIONS

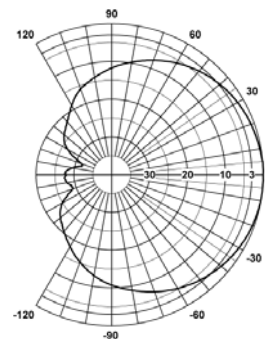
Frequency Range, MHz	1850-1990
Horizontal Beamwidth, deg	90
Vertical Beamwidth, deg	5
Gain, dBi (dBd)	17.5 (15.4)
1st Upper Sidelobe Suppression, dB	> 14
Front-To-Back Ratio, dB	30
VSWR	< 1.3:1
Maximum Power Input, W	400
Polarization	Vertical
3rd Order IMP @ 2 x 43 dBm, dBc	> 150

#### MECHANICAL SPECIFICATIONS

Dimensions - HxWxD, mm (in)	1855 x 198 x 50 (72.99 x 7.79 x 1.97)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.37 (3.93)
Rated Wind Speed, km/h (mph)	160 (100)
Maximum Thrust @ Rated Wind, N (lbf)	595 (133)
Front Thrust @ Rated Wind, N (lbf)	595 (133)
Reflector Material	Aluminum
Radiating Element Material	Aluminum
Radome Material	Fiberglass
Radome Color	Light Grey RAL7035
Weight w/o Mtg Hardware, kg (lb)	6 (13.2)
Packing Dimensions - HxWxD, m (ft)	1.9 x 0.3 x 0.17 (6.27 x 0.99 x 0.56)
Packing Dimensions, HxWxD, mm (in)	1960 x 300 x 170 (77.13 x 11.81 x 6.69)



Vertical Pattern



Horizontal Pattern