

# STEALTH Concealment Solutions

## Pole Topper Products

Featuring Optional InvisiWave® 5G-Ready Material



For the next generation of wireless deployments, small cell sites using 5G mmWave radios (28 GHz + 39 GHz) will be widely installed for network densification purposes.

When placed in a community's right-of-way, a concealment solution may be necessary to hide radios in applications such as utility poles, street light poles, rooftop screenwalls, chimneys, etc. Concealments help with city approvals and can speed up the network deployment process.

### InvisiWave Features:

- Rigid surface
- Paint adhesion
- UV Resistant
- Hydrophobic surface
- Easy to fabricate and create various form factors
- Chemical and fire resistance (UL94, EN13501)
- Tested from 700 MHz to 100 GHz
- Thermal insulation
- Patent pending
- Minimum insertion loss (avg. 0.1dB @ 28GHz, 0° angle of incidence)  
(avg. 0.2dB @ 24GHz, 0° angle of incidence)  
(avg. 0.4dB @ 39GHz, 0° angle of incidence)
- Thoroughly tested to identify beam forming impact
- Compatible to back lobe mitigation techniques
- Class 'A' Fire Rated
- City of Los Angeles Approved (Dept. of Building & Safety LARR 25400)



### InvisiWave Radome Features:

- These modular systems allow ultimate configurability for all technologies. Up to four modules can be stacked together
- Various degrees of concealment are available
- Concealment materials include powder-coated perforated steel and proprietary InvisiWave technology
- Fully concealed versions are available in 22" and 26" diameters. Limited downtilt can be achieved within the 26" diameter version.
- A thin profile (18" diameter) version is available when partial concealment is desired
- Active cooling is available depending on equipment configuration
- Can be ordered in various colors to blend in with the surrounding environment
- All structural steel hot dip galvanized per ASTM A123 with optional powder coated finish to customer color specification
- Ventilated radomes available
- Contact us with your equipment configuration

**SPECIFICATIONS**

**STEALTH Concealment Solutions**

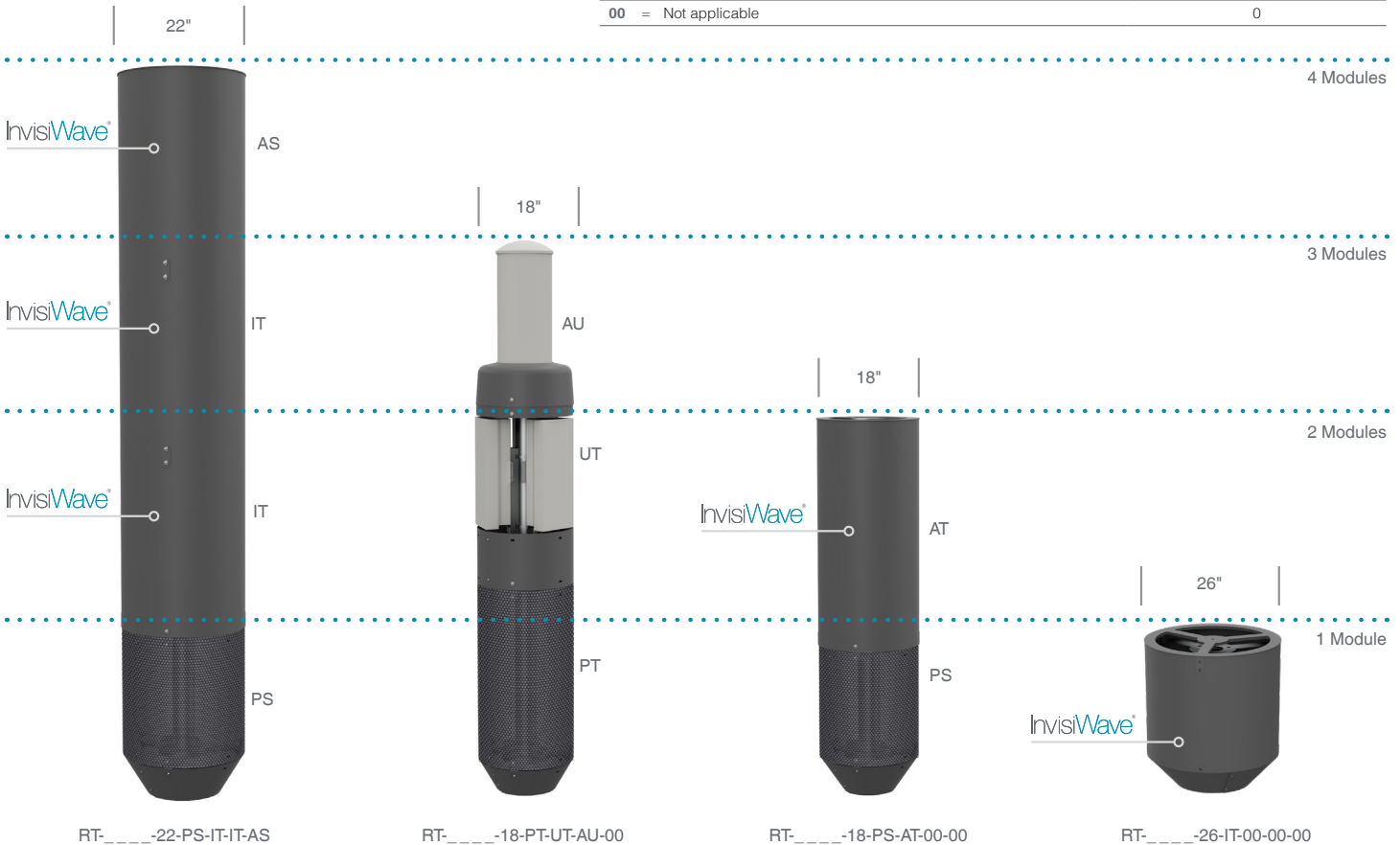
**Pole Topper Products**

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Model Number Configuration



a: Existing Pole Material	bb: Existing Pole Diameter	c: Transition Amount	dd: Topper Diameter (in)	ee: Module Type
C = Composite	= rounded to the nearest inch example: 7.25" = QZ	0 = No Transition	18 = Thin profile, supports up to 30 degrees of downtilt, full concealment of 5g radios not available in this diameter	AS = Omni antenna, InvisiWave concealment, short Module Height [if top module] (in) 36
M = Metal		6 = 60 Degree Transition	22 = Fully concealed, downtilt not supported	AT = Omni antenna, InvisiWave concealment, tall 48
W = Wood			26 = fully concealed with limited downtilt (10-15 degrees), depending on radio	AU = Omni antenna, unconcealed Varies with antenna
				FS = Radio module, InvisiWave concealment, short, active cooling 24 [27]
				FT = Radio module, InvisiWave concealment, tall, with active cooling (fans) 33 [36]
				IS = Radio module, InvisiWave concealment, short, passive cooling 24 [27]
				IT = Radio module, InvisiWave concealment, tall, passive cooling 33 [36]
				PS = Radio module, perforated steel concealment, short 24
				PT = Radio module, perforated steel concealment, tall 33
				US = Radio module, unconcealed, short 24
				UT = Radio module, unconcealed, tall 33
				00 = Not applicable 0



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InvisiWave® Technical Specifications

Property	Method	Units	Value
Thickness		mm	3
Density	ASTM D-792	g/cm <sup>3</sup>	0.6 +/- 0.02
Flexural Modules	ASTM D-790	mPa	1600
Shore Hardness	ASTM D-2240	Shore D	60
Flammability	UL94		V-0
Flammability (Smoke Developed)	ASTM E84/ ASTM E2768		10(550)/7.4ft
Surface Resistance	ASTM D-257	Ohm	4.1x10 <sup>14</sup>
Heat Deflection Temperature	ASTM D-648 @ 1.8Pa Load	°C	62
Coefficient of Thermal Expansion	ASTM D-696	10-5/°C	6.7
Tested/Approved Spectrum	sub 6GHz, 24GHz, 28GHz and 39GHz		
Flammability Certification	Class 'A' Fire rated – City of Los Angeles Dept. of Building & Safety Approved (LARR)		

