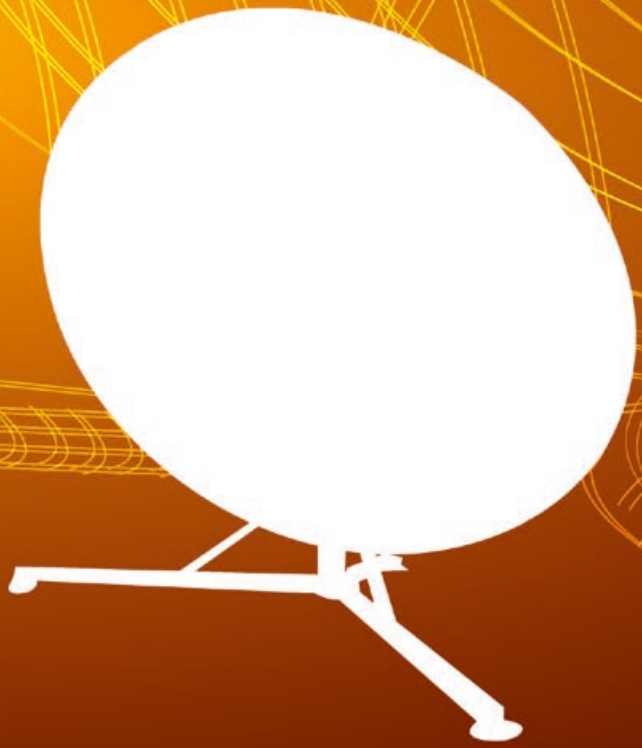
FLYAWAY SYSTEMS



Temix communications

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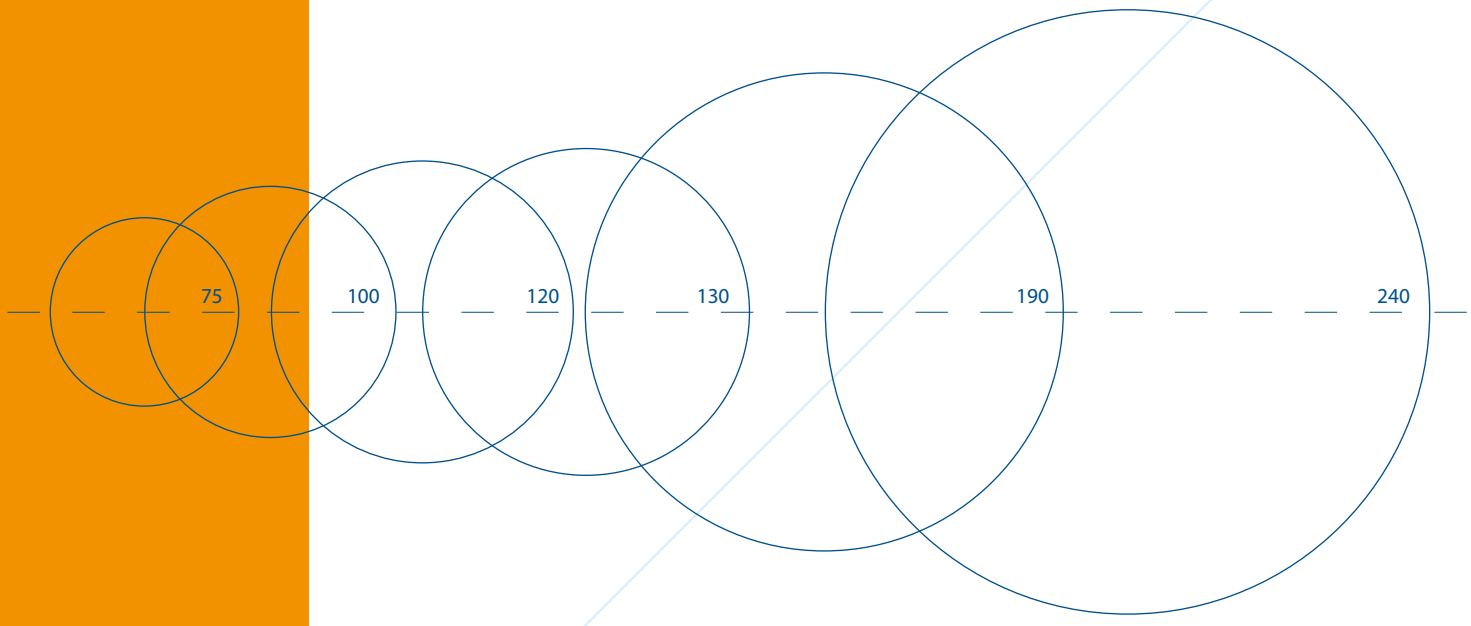
FLYAWAY Antenna Series

The Temix Flyaway Antenna series is designed to answer to the hardest demands of reliable operations also in extreme environmental conditions taking in highest consideration the point of view of the portability as well as of the easy and fast assembling/disassembling.

Quick No Tools deployment, rugged design, repeatability and compliance of performances with worldwide satellite authorities are the key points.
The comprehensive range of sizes includes **75cm, 100cm, 120cm, 130cm, 190cm and 240cm Flyaways.**

All the models are available in manual drive, manual drive with pointing supporting tool and fully motorized with automatic satellite acquisition in minutes.
Available in C, X, Ku, DBS, Ka and Q band, thanks to fast lock/unlock swappable feed systems, the Flyaway Antennas can be provided as multiband Terminals.



Main Features

Carbon Fiber Reflector

- Precision Surface
- High Stiffness

Easy Deployment

- Optimized Weight matching best strength
- Captive Hardware
- Precision Alignment

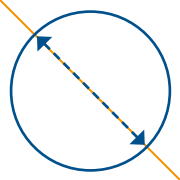
Transit Cases:

- Weight & Dimensions IATA Compliant
- #1: single case 155 cm, 32kg; #2: two cases 155 cm, <23Kg/each

Models Legenda:

xx=XC "X-Band Circ. Pol"
xx=KU "Ku-Band"
xx=KA "Ka-Band Circ. Pol"

M= Manual Drive
F= Full Motion Drive



1.0m FLYAWAY

The Temix FLY-100-M/F-xx-D 1.0m Flyaway Antenna (Single, Dual or Tri-Bands) is designed for the lightest portable worldwide transmit operations.
This antenna system, with Manual or Full Motion drive system, consists of a Segmented Carbon Fiber reflector and a robust aluminum tripod base mount that results in a high performance rigid antenna especially suited for hard environmental conditions.
Assembling "100% Tools Free".
The unique shape and the accurate reflector surface provide good sidelobe and cross polarization performance. Repeatability is maintained with precision registration of the 6 reflector segments and the feed support structure. All the models are provided with a 2-Port Feed as a standard. In Dual and Tri-Band configuration the Feeds are interchangeable on field, fast and No-Tools.

Specifications Table

Features	X-Band	Ku-Band	Ka-Band
Polarization	Circular	Linear	Circular
Frequency Range (GHz) - standard	Rx: 7.250-7.750 Tx: 7.900-8.400	Rx: 10.95-12.75 Tx: 13.75-14.50	Rx: 19.20-20.20 Tx: 29.00-30.00
Frequency Range (GHz) - optional	////	Rx: 10.95-12.25 Tx: 12.75-14.50	Rx: 20.20-21.20 Tx: 30.00-31.00
Gain (mid band)	Rx: 35.8 dBi Tx: 36.5 dBi	Rx: 39.5 dBi Tx: 41.1 dBi	Rx: 44.6 dBi Tx: 48.0 dBi
G/T (10° EL, Clear Sky)	14.4 dB/K (0.7dB LNB NF)	18.0 dB/K (0.8dB LNB NF)	20.5 dB/K (1.4dB LNB NF)
Cross Pol Isolation VSAT STD	////	>30dB 1dB Contour	////
Cross Pol Isolation SNG STD	////	>35dB 1dB Contour	////
Axial Ration	< 2dB	////	< 1dB
Isolation Tx/Rx	90/90 dB	90/35 dB	90/35 dB
Insertion Loss Tx/Rx	0.6/0.45 dB	0.3/0.25 dB	0.3/0.25 dB
Return Loss Tx/Rx	> 17.0 dB typ (Rx/Tx)		

Physical	X-Band	Ku-Band	Ka-Band
Feed Interfaces	Rx: WR112 Tx: CPR112	Rx: WR75 Tx: WR75	Rx: WR42 Tx: WR28
Optic Geometry	Offset prime center focus or Dual Optic		
Mount Geometry	Elevation over Azimuth Tripod		
Travel Range			
Manual & Full Motion Drive	AZ: 360°; EL: 5° to 90°; POL: +/-110° (Linear Polarization) Continuous		
Drive Speed	2°/sec deploy; 0.2°/sec peaking (Adjustable)		
Controller	Advanced Satellite Acquisition Controller (for manual drive system) for pointing supporting or Antenna Control Unit for Fully Automatic Autopointing		

Environmental	X-Band	Ku-Band	Ka-Band
Wind	Operational 70km/h (with ballasts or anchors); Survival 100km/h deployed (with ballasts or anchors); 120km/h stowed		
Temperature	Operational -20°/50°C; Storage -30°/60°C; (optional: -32°/55°C Operational, -40°/70°C Storage)		
Humidity	100% Condensing		
Altitude	up to 5000m		

Transit Cases:

all devices are included in a Single or 2 IATA Compliant Transit Cases constructed for aircraft transportation.
The cases are lined with closed cell high density foam and the parts are custom fit and supported with the foam for extra protection.

Main Features

Carbon Fiber Reflector
- Precision Surface
- High Stiffness

Easy Deployment
- Optimized Weight matching best strength
- Captive Hardware
- Precision Alignment

High Performance
- Low Sidelobes
- High E.I.R.P. Capability

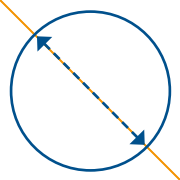
Transit Cases:
Weight & Dimensions

Full Motion (dual optic)
#1: 150x54x62 cm, 64kg.
#2: 150x54x62 cm, 64kg.

Manual (prime focus)
#1: 155 cm, 32kg.
#2: 155 cm, 32kg.

Models Legenda:
xx=XC "X-Band Circ. Pol"
xx=KU "Ku-Band"
xx=KA "Ka-Band Circ. Pol"

M= Manual Drive
F= Full Motion Drive



1.2m FLYAWAY

The Temix FLY-120-M/F-xx-D 1.2m Flyaway Antenna (Single, Dual or Tri-Bands) is designed for the lightest portable worldwide transmit operations.
This antenna system, with Manual or Full Motion drive system, consists of a Segmented Carbon Fiber reflector and a robust aluminium tripod base mount that results in a high performance rigid antenna especially suited for hard environmental conditions.
Assembling "100% Tools Free".
The unique shape and the accurate reflector surface provide good sidelobe and cross polarization performance. Repeatability is maintained with precision registration of the 3 (Dual Optic) or 6 (Prime Focus) reflector segments and the feed support structure. All the models are provided with a 2-Port Feed as a standard. In Dual and Tri-Band configuration the Feeds are interchangeable on field, fast and No-Tools.

Specifications Table

Features	X-Band	Ku-Band	Ka-Band
Polarization	Circular	Linear	Circular
Frequency Range (GHz) - standard	Rx: 7.250-7.750 Tx: 7.900-8.400	Rx: 10.95-12.75 Tx: 13.75-14.50	Rx: 19.20-20.20 Tx: 29.00-30.00
Frequency Range (GHz) - optional	////	Rx: 10.95-12.25 Tx: 12.75-14.50	Rx: 20.20-21.20 Tx: 30.00-31.00
Gain (mid band)	Rx: 37.4 dBi Tx: 38.1 dBi	Rx: 41.1 dBi Tx: 42.6 dBi	Rx: 46.2 dBi Tx: 49.6 dBi
G/T (10° EL, Clear Sky)	16.0 dB/K (0.7dB LNB NF)	19.6 dB/K (0.8dB LNB NF)	22.1 dB/K (1.4dB LNB NF)
Cross Pol Isolation VSAT STD	////	>30dB 1dB Contour	////
Cross Pol Isolation SNG STD	////	>35dB 1dB Contour	////
Axial Ration	< 2dB	////	< 1dB
Isolation Tx/Rx	90/90 dB	90/35 dB	90/35 dB
Insertion Loss Tx/Rx	0.6/0.45 dB	0.3/0.25 dB	0.3/0.25 dB
Return Loss Tx/Rx	> 17.0 dB typ (Rx/Tx)		

Physical	X-Band	Ku-Band	Ka-Band
Feed Interfaces	Rx: WR112 Tx: CPR112	Rx: WR75 Tx: WR75	Rx: WR42 Tx: WR28
Optic Geometry	Offset prime center focus or Dual Optic		
Mount Geometry	Elevation over Azimuth Tripod		
Travel Range			
Manual & Full Motion Drive	AZ: 360°; EL: 5° to 90°; POL: +/-110° (Linear Polarization) Continuous		
Drive Speed	2°/sec deploy; 0.2°/sec peaking (Adjustable)		
Controller	Advanced Satellite Acquisition Controller (for manual drive system) for pointing supporting or Antenna Control Unit for Fully Automatic Autopointing		

Environmental	X-Band	Ku-Band	Ka-Band
Wind	Operational 70km/h (with ballasts or anchors); Survival 100km/h deployed (with ballasts or anchors); 120km/h stowed		
Temperature	Operational -20°/50°C; Storage -30°/60°C; (optional: -32°/55°C Operational, -40°/70°C Storage)		
Humidity	100% Condensing		
Altitude	up to 5000m		

Transit Cases:

all devices are included in 2 hardcases constructed for aircraft transportation.
The cases are lined with closed cell high density foam and the parts are custom fit and supported with the foam for extra protection.

Main Features

Carbon Fiber Reflector
- Precision Surface
- High Stiffness

Easy Deployment
- Optimized Weight matching best strength
- Captive Hardware
- Precision Alignment

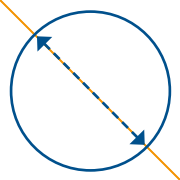
High Performance:
- Low Sidelobes
- High E.I.R.P. Capability

Compliances:
EESS-502, IESS-601E,
MIL-STD-188-164B
MIL-STD-810G

Transit Cases:
Weight & Dimensions
#1: 110x70x87cm, 69Kg
#2: 118x55x50cm, 48Kg

Models Legenda:
xx=CC "C-Band Circ. Pol"
xx=CL "C-Band Lin. Pol"
xx=XC "X-Band Circ. Pol"
xx=Ku "Ku-Band"

M= Manual Drive
F= Full Motion Drive



1.9m FLYAWAY

The Temix FLY-190-M/F-xx-D 1.9m Flyaway Antenna (Single, Dual or Tri-Bands) is designed for the lightest portable worldwide transmit operations.
This antenna system, with Manual or Full Motion drive system, consists of a Segmented Carbon Fiber reflector and a robust aluminium tripod base mount that results in a high performance rigid antenna especially suited for hard environmental conditions.
Assembling "100% Tools Free".
The unique shape and the accurate reflector surface provide good sidelobe and cross polarization performance. Repeatability is maintained with precision registration of the 9 reflector segments and the feed support structure. All the models are provided with a 2-Port Feed as a standard. In Dual and Tri-Band configuration the Feeds are interchangeable on field, fast and No-Tools.

Specifications Table

Features	C-Band	X-Band	Ku-Band
Polarization	Circular / Linear	Circular	Linear
Frequency Range (GHz) - standard	Rx: 3.625-4.200 Tx: 5.850-6.425	Rx: 7.250-7.750 Tx: 7.900-8.400	Rx: 10.95-12.75 Tx: 13.75-14.50
Frequency Range (GHz) - optional	Rx: 4.500-4.800 Tx: 6.425-6.725	////	Rx: 10.95-12.25 Tx: 12.75-14.50
Gain (mid band)	Rx: 36.0 dBi Tx: 40.0 dBi	Rx: 41.2 dBi Tx: 42.1 dBi	Rx: 45.1 dBi Tx: 46.6 dBi
G/T (10° EL, Clear Sky)	15.6 dB/K (35K LNB NT)	20.0 dB/K (70K LNB NT)	23.6 dB/K (70K LNB NT)
Cross Pol Isolation	>30dB 1dB Contour	////	>35dB 1dB Contour
Axial Ration	< 1.3 standard < 1.09 optional	< 2dB	////
Isolation Tx/Rx	85/35 dB	90/90 dB	90/35 dB
Insertion Loss Tx/Rx	0.6/0.25 dB	0.9/0.45 dB	1.1/0.25 dB
Return Loss Tx/Rx	> 17.0 dB typ (Rx/Tx)		

Physical	C-Band	X-Band	Ku-Band
Feed Interfaces	Rx: WR229 Tx: WR137	Rx: WR112 Tx: CPR112	Rx: WR75 Tx: WR75
Optic Geometry	Onset prime center focus		
Mount Geometry	Elevation over Azimuth Tripod		
Travel Range			
Manual & Full Motion Drive	AZ: 360°; EL: 5° to 90°; POL: +/-110° (Linear Polarization) Continuous		
Drive Speed	2°/sec deploy; 0.2°/sec peaking (Adjustable)		
Controller	Advanced Satellite Acquisition Controller (for manual drive system) for pointing supporting or Antenna Control Unit for Fully Automatic Autopointing		

Environmental	C-Band	X-Band	Ku-Band
Wind	Operational 70km/h (with ballasts or anchors); Survival 100km/h deployed (with ballasts or anchors); 120km/h stowed		
Temperature	Operational -20°/50°C; Storage -30°/60°C; (optional: -32°/55°C Operational, -40°/70°C Storage)		
Humidity	100% Condensing		
Altitude	up to 5000m		

Transit Cases:

all devices are included into five hardcases (Military Standard) constructed for aircraft transportation.
The cases are lined with closed cell high density foam and the parts are custom fit and supported with the foam for extra protection..

Main Features

Carbon Fiber Reflector
- Precision Surface
- High Stiffness

Easy Deployment
- Optimized Weight matching best strength
- Captive Hardware
- Precision Alignment

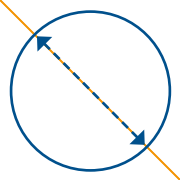
High Performance:
- Low Sidelobes
- High E.I.R.P. Capability

Compliances:
EESS-502, IESS-601E,
MIL-STD-188-164B
MIL-STD-810G

Transit Cases:
Weight & Dimensions
#1: 150x48x101cm, 74Kg.
#2: 184x39x42cm, 58Kg.
#3: 150x48x101cm, 77Kg.
#4: 150x48x101cm, 80Kg.
#5: 184x39x42cm, 45Kg

Models Legenda:
xx=CC "C-Band Circ. Pol"
xx=CL "C-Band Lin. Pol"
xx=XC "X-Band Circ. Pol"
xx=Ku "Ku-Band"

M= Manual Drive
F= Full Motion Drive



2.4m FLYAWAY

The Temix FLY-240-M/F-xx-D 2.4m Flyaway Antenna (Single, Dual or Tri-Bands) is designed for the lightest portable worldwide transmit operations.
This antenna system, with Manual or Full Motion drive system, consists of a Segmented Carbon Fiber reflector and a robust aluminium tripod base mount that results in a high performance rigid antenna especially suited for hard environmental conditions.
Assembling "100% Tools Free".
The unique shape and the accurate reflector surface provide good sidelobe and cross polarization performance. Repeatability is maintained with precision registration of the 9 reflector segments and the feed support structure. All the models are provided with a 2-Port Feed as a standard. In Dual and Tri-Band configuration the Feeds are interchangeable on field, fast and No-Tools.

Specifications Table

Features	C-Band	X-Band	Ku-Band
Polarization	Circular / Linear	Circular	Linear
Frequency Range (GHz) - standard	Rx: 3.625-4.200 Tx: 5.850-6.425	Rx: 7.250-7.750 Tx: 7.900-8.400	Rx: 10.95-12.75 Tx: 13.75-14.50
Frequency Range (GHz) - optional	Rx: 4.500-4.800 Tx: 6.425-6.725	////	Rx: 10.95-12.25 Tx: 12.75-14.50
Gain (mid band)	Rx: 38.0 dBi Tx: 42.0 dBi	Rx: 43.4 dBi Tx: 44.1 dBi	Rx: 47.1 dBi Tx: 48.7 dBi
G/T (10° EL, Clear Sky)	17.6 dB/K (35K LNB NT)	22.0 dB/K (70K LNB NT)	25.6 dB/K (70K LNB NT)
Cross Pol Isolation	>30dB on axis >26dB 1dB Contour	////	>33dB on axis >28dB 1dB Contour
Axial Ration	< 1.3 standard < 1.09 optional	< 2dB	////
Isolation Tx/Rx	85/35 dB	90/90 dB	90/35 dB
Insertion Loss Tx/Rx	0.3/0.25 dB	0.6/0.45 dB	0.3/0.25 dB
Return Loss Tx/Rx	> 17.0 dB typ (Rx/Tx)		

Physical	C-Band	X-Band	Ku-Band
Feed Interfaces	Rx: WR229 Tx: WR137	Rx: WR112 Tx: CPR112	Rx: WR75 Tx: WR75
Optic Geometry	Offset prime focus		
Mount Geometry	Elevation over Azimuth Tripod		
Travel Range			
Manual & Full Motion Drive	AZ: 360°; EL: 5° to 90°; POL: +/-110° (Linear Polarization) Continuous		
Drive Speed	2°/sec deploy; 0.2°/sec peaking (Adjustable)		
Controller	Advanced Satellite Acquisition Controller (for manual drive system) for pointing supporting or Antenna Control Unit for Fully Automatic Autopointing		

Environmental	C-Band	X-Band	Ku-Band
Wind	Operational 70km/h (with ballasts or anchors); Survival 100km/h deployed (with ballasts or anchors); 120km/h stowed		
Temperature	Operational -20°/50°C; Storage -30°/60°C; (optional: -32°/55°C Operational, -40°/70°C Storage)		
Humidity	100% Condensing		
Altitude	up to 5000m		

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