

# Microwave Path Data Sheet

## COMSEARCH

19700 Janelia Farm Boulevard, Ashburn, VA, 20147  
(703)726-5500 [www.comsearch.com](http://www.comsearch.com)

PCN Date: 06/14/2010  
Job Number: 100614COMSTI02

Prev Job Num: 090608COMSGM01  
RCN Number: 10061401

<b>Administrative Information</b>	<b>PA-PHL5435A PA</b>	<b>PA-PHL5436A PA</b>
City/County	/Delaware	Philadelphia/Philadelphia
Status / License Basis	Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign		WQKR937
Licensee Code	TESTXY	TESTXY
Licensee Name	COMSEARCH	COMSEARCH
Radio Service / Station Class	MG -- Microwave Industrial/Business Pool	FXO -- Fixed

<b>Site Information</b>		
Latitude (NAD 83)	39 °57' 41.3~ N	39 °57' 33.1~ N
Longitude (NAD 83)	75 °17' 10.6~ W	75 °14' 49.9~ W
Ground Elevation (m/ft-AMSL)	50.50 / 165.7	30.00 / 98.4
Antenna Structure Registration #	1037840	
Path Azimuth (°)	94.318	274.344
Path Length (km / miles)		3.349 / 2.081

<b>Transmit Antenna</b>	86602D	86602D
Manufacturer	DRAGONWAVE INC	DRAGONWAVE INC
Model	A-ANT-18G-2-C	A-ANT-18G-2-C
Gain(dBi) / Beamwidth(°) / Tilt(°)	38.6 / 2.60 / -0.59	38.6 / 2.60 / 0.56
Centerline (m / ft - AGL)	50.90 / 167.0	37.80 / 124.0

<b>Receive Antenna</b>	Same As Transmit	
Manufacturer		
Model		
Gain (dBi) / Beamwidth (°)		
Centerline (m / ft - AGL)		

<b>Diversity Receive Antenna</b>		
Manufacturer		
Model		
Gain (dBi) / Beamwidth (°)		
Centerline (m / ft - AGL)		

<b>Radio Information</b>	TEMR29	TEMR29
Manufacturer	DRAGONWAVE INC	DRAGONWAVE INC
Model	18HD50HFC364V02	18HD50HFC364V02
Model Description	HORIZON DUO	HORIZON DUO
Emission Designator / Modulation	47M1D7W      256 QAM	47M1D7W      256 QAM
Loading	1 CH    DIG 364000.000	1 CH    DIG 364000.000
Stability (%)	0.001	0.001
	Nominal    Coordinated    Maximum	Nominal    Coordinated    Maximum
Power (dBm)		15.5
Received Level (dBm)		-35.7
EIRP (dBm)		54.1
Fixed Loss: Tx / Common (dB)	0.0 / 0.0	0.0 / 0.0
Free Space Loss (dB)		128.4

<b>Transmit Frequencies (MHz)</b>	17965.0000V(5)	18065.0000V(7)	19525.0000V(5)	19625.0000V(7)
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PCN Date: 06/14/2010

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RCN Number: 10061401

### Administrative Information

**PA-PHL5395A PA**  
 City/County Yeadon/Delaware  
 Status / License Basis Engineering Proposal / PRIMARY OPERATION  
 Call Sign  
 Licensee Code TESTXY  
 Licensee Name COMSEARCH  
 Radio Service / Station Class MG -- Microwave Industrial/Business Pool

**PA-PHL5436A PA**  
 City/County Philadelphia/Philadelphia  
 Status / License Basis Engineering Proposal / PRIMARY OPERATION  
 Call Sign WQKR937  
 Licensee Code TESTXY  
 Licensee Name COMSEARCH  
 Radio Service / Station Class FXO -- Fixed

### Site Information

Latitude (NAD 83)	39 °56' 25.7~ N	39 °57' 33.1~ N
Longitude (NAD 83)	75 °15' 13.3~ W	75 °14' 49.9~ W
Ground Elevation (m/ft-AMSL)	29.12 / 95.5	30.00 / 98.4
Antenna Structure Registration #		
Path Azimuth (°)	14.958	194.962
Path Length (km / miles)	2.152 / 1.337	

### Transmit Antenna

Manufacturer	86602D DRAGONWAVE INC	86602D DRAGONWAVE INC
Model	A-ANT-18G-2-C	A-ANT-18G-2-C
Gain(dBi) / Beamwidth(°) / Tilt(°)	38.6 / 2.60 / -0.22	38.6 / 2.60 / 0.20
Centerline (m / ft - AGL)	46.63 / 153.0	37.80 / 124.0

### Receive Antenna

Same As Transmit

Manufacturer  
 Model  
 Gain (dBi) / Beamwidth (°)  
 Centerline (m / ft - AGL)

### Diversity Receive Antenna

Manufacturer  
 Model  
 Gain (dBi) / Beamwidth (°)  
 Centerline (m / ft - AGL)

### Radio Information

Manufacturer	TMO17 DRAGONWAVE INC	TMO17 DRAGONWAVE INC
Model	18HD50SFC371V02	18HD50SFC371V02
Model Description	HORIZON DUO	HORIZON DUO
Emission Designator / Modulation	49M2D7W      256 QAM	49M2D7W      256 QAM
Loading	1 CH DIG 371000.000	1 CH DIG 371000.000
Stability (%)	0.001	0.001
	Nominal    Coordinated    Maximum	Nominal    Coordinated    Maximum
Power (dBm)	5.5	5.5
Received Level (dBm)	-41.9	-41.9
EIRP (dBm)	44.1	44.1
Fixed Loss: Tx / Common (dB)	0.0 / 0.0	0.0 / 0.0
Free Space Loss (dB)	124.6	

<b>Transmit Frequencies (MHz)</b>	18015.0000V(6)	18115.0000V(8)	19575.0000V(6)	19675.0000V(8)
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