



PROVEN, FUTURE-PROOF P25 PLATFORM

KEY BENEFITS

Scalable Internet Protocol (IP) network

Secure digital trunked voice and data

Supports Project 25 Common Air Interface (P25 CAI)

Seamless integration of Commercial-Off-The-Shelf (COTS) applications and equipment

Simplified user interface with compact and integrated hardware footprint

HARRIS MASTR[®] V BASE STATION

VHF, UHF, 700, 800, 900 MHz

The Harris MASTR V Base Station features an IP-based architecture engineered to scale with each organization's critical communication needs as they change over time.

The MASTR V Base Station provides trunked communications to incorporate P25 digital voice and data. Compliant with the P25 CAI, this linear simulcast solution employs an on-board voice encoder/decoder to translate digital voice for immediate access through a user's existing network.

MASTR V delivers significant IP-based enhancements including seamless integration of COTS data applications and devices. It supports more economical routing and backhaul of network information and critical data redundancy.

The Harris MASTR V Base Station has a user-friendly software interface for easy setup, field upgrades and remote programming. Its compact, integrated hardware design allows up to eight channels per cabinet and simplifies maintenance and servicing.

PROVEN MASTR V BASE STATION

GENERAL

Size (Base Station)	4 channels per 5 Rack Unit Shelf
Open Rack Dimensions	86.0 H x 20.5 W x 19.295 D in (218 H x 52 W x 49 D cm)
Cabinet Dimensions	86.0 H x 23.0 W x 31.5 D in (218 H x 58 W x 80 D cm)
Power	90-230 VAC or -48 VDC
Ambient Temperature Range	-22° F to +140° F (-30° C to +60° C)
Humidity	90% @ 122° F (+50° C)
Altitude	Operational: Up to 15,000 ft (4,572 m) Shippable: Up to 50,000 ft (15,240 m)

TRANSMITTER

	VHF	UHF	700	800	900
Frequency Range (MHz)	150-174	380-400 403-430 450-470 470-494 494-520	764-776	851-870	935-941
Rated Power Output (W)	100	100	100	100	100
RF Output Impedance (ohm)	50	50	50	50	50
Conducted Spurious and Harmonic Emissions (dBc)	<-86	<-86	<-70	<-70	<-70
Frequency Stability (ppm)	<0.1	<0.1	<0.1	<0.1	<0.1
Channel Spacing (kHz)	12.5	12.5	12.5	12.5	12.5
Synthesizer Step Size (kHz)	1.25	1.25	6.25	6.25	6.25

RECEIVER

	VHF	UHF	700	800	900
Frequency Range (MHz)	150-174	380-400 403-430 450-470 470-494 494-520	799-817	806-824	896-902
Sensitivity, TIA-P25 (dBm)	<-118	<-118	<-119	<-119	<-119
RF Output Impedance (ohm)	50	50	50	50	50
Intermodulation Rejection, TIA-P25 (dB)	>80	>80	>80	>80	>80
Spurious and Image Rejection (dB)	≥90	≥90	≥90	≥90	≥90
Frequency Stability (ppm)	<0.1	<0.1	<0.1	<0.1	<0.1
Channel Spacing (kHz)	12.5	12.5	12.5	12.5	12.5
Synthesizer Step Size (kHz)	1.25	1.25	6.25	6.25	6.25

OPERATIONAL MODES

Mode	Modulation	Emission Designator
P25 Phase 1	C4FM	8K00F1D/8K00F1E*
P25 Linear Simulcast	WCQPSK	9K70D1W
P25 Phase 2, HVD-FDMA	HDQPSK	9K80D7W
P25 Phase 2, HVD-TDMA	DQPSK	18KD1W, 12K5D1W

REGULATORY DATA

Frequency Range (MHz)	Power Output (Adjustable) (W)	FCC Type Acceptance Number	Applicable FCC Rules	Industry Canada Certification Number	Applicable Industry Canada Rules	NTIA Certification Number
150-174	10-100	OWDTR-0065-E	22, 80, 90	3636B-0065	RSS-119	J/F 12/09628
380-400	10-100	NA	NA	NA	NA	J/F 12/09628
406.1-420	10-100	NA	NA	NA	NA	J/F 12/09628
420-430	10-100	OWDTR-0129-E	90	3636B-0129	RSS-119	NA
450-470	10-100	OWDTR-0130-E	22, 80, 90	3636B-0130	RSS-119	NA
470-494	10-100	OWDTR-0100-E	90	NA	NA	NA
494-512	10-100	OWDTR-0101-E	90	NA	NA	NA
769-775	10-100	OWDTR-0159-E	90	3636B-0159	RSS-119	NA
851-869	10-100	OWDTR-0158-E	90	3636B-0158	RSS-119	NA
935-940	10-100	OWDTR-0156-E	90	3636B-0156	RSS-119	NA

*VHF: 420-430, 450-470, 935-940

About Harris Corporation

Harris Corporation is a leading technology innovator, solving customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world.

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INFORM AND PROTECT™