

M1114 / Golden HMMWV Power

Electrical systems used in theater

Common Remotely Operated Weapons Station (CROWS)



Improved Target Acquisition Sight (ITAS) TOW



Battery Powered Motorized Turret Unit (BPMTU)



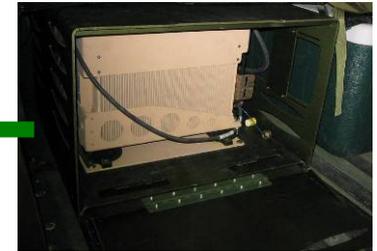
SINCGARS & VIC-3



DAGR/PLGR GPS Systems



CREW 2 (DUKE)



Other Possible Equipment:

- Anti-IED Systems
- MTS
- FH MUX
- Micro Climate cooling vest
- Harris Radio
- CHAMELEON
- Duke 2 plus

Drivers Vision Enhancement (DVE)



Blue Force Tracker (FBCB2)



Long Range Acoustic Device™ (LRAD®)



Report Documentation Page

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Power draw on 200A HMMWV Alternator

The Golden HMMWV (M1114) has a 200A alternator which can provide between 110 - 180 Amps of usable power. At engine idle, its output is 40A.

Item	Steady State (A)	Surge (A)
Engine, drivetrain & accessories	5	30
A/C on High (Low Steady State = 16A)	23	40
Dual Long Range SINCGARS	2.25	18.5
Blue Force Tracker	0.015	2.5
DAGR	0.25	1.5
EPLRS	2.5	35
DUKE	13	30
AFES (Surge at discharge only)	0.1	25
VIS (Surge for 15ms on cueing)	2	20
DVE (estimate)	2	4
BPMTU (see smart-charging note*)	0.24	60
VIC-3	1.35	15
Total in Amps:	51.705	281.5

Future and Optional Power Draws

CROWS	16	32
Anti-IED System 1	40	45
Anti-IED System 2	60	190
Anti-IED System 3	<1	<2
PLGR	0.075	0.125
MTS	1.7	3.5
FH MUX	3.57	3.57
Micro Climate cooling vest (estimate)	1	3
ITAS TOW	38	45
Harris Radio	<20	20
CHAMELEON	12	60
Duke 2 plus (estimate)	20	40

NOTE: All Future and Optional Power Draws would NOT be installed concurrently, due to various purposes and physical constraints.

*NOTE: BPMTU smart-charging: 12-60A while charging turret batteries; only during low alternator loads; 0.050-0.240A with charged turret batteries

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Acronyms

AFES – Automatic Fire Extinguishing System

BPMTU – Battery Powered Motorized Turret Unit

CHAMELEON – Modular Communication Suite

CROWS – Common Remotely Operated Weapons Station

DAGR – Defense Advanced GPS Receiver

DUKE – Jammer formerly CREW

DVE – Driver Vision Enhancement (System)

EPLARS – Enhanced Position Location And Reporting System

ITAS – Improved Target Acquisition System

TOW - Tube-launched, Optically tracked, Wire-guided

FH MUX – Frequency Hopping Multiplexer (Location Reporting)

MTS – Movement Tracking System

PLGR – Precision Lightweight GPS Receiver

VIS – Vehicle Intercommunication System