

# The Airbus A320 Procedures Handbook Vol. 1

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## Electrical Supply Table for Selected Flight and Navigation Instruments

Color Legend: Color Indicates Whether Equipment is Available in Emergency Electrical Configuration	
Always available in emergency electrical configuration and "flight on batteries" configuration.	"Always."
Available in emergency electrical configuration but lost in "flight on batteries" configuration (i.e. if the RAT stalls).	"Usually."
Normally lost in emergency electrical configuration, but available in limited circumstances as described in notes.	"Sometimes."
Never powered in emergency electrical configuration.	"Never."

Equipment	Electrical Supply Bus		Notes
	Normal	Backup	
<b>Probe Heat Computers (PHCs) and Air Data Probe Heating</b>			
CAPT PHC	DC ESS		
CAPT Pitot Heat	AC ESS		When AC 1 and AC 2 are lost and AIR DATA is switched to CAPT 3, STBY pitot heating is switched to AC ESS Bus, and CAPT pitot heating is lost.
CAPT Static Heat	DC 1		
CAPT AOA Heat	AC ESS SHED		
CAPT TAT Heat	AC 1		
F/O PHC	DC 2		
F/O Pitot Heat	AC 2		
F/O Static Heat	DC 2		
F/O AOA Heat	AC 2		
F/O TAT Heat	AC 2		
STBY PHC Heat	DC 1		
STBY Pitot Heat	AC 1	AC ESS	Backup supply only if AC 1 and AC 2 are lost and AIR DATA is switched to CAPT 3.
STBY Static Heat	DC 1		
STBY AOA Heat	AC 1		

Equipment	Electrical Supply Bus		Notes
	Normal	Backup	
<b>Air Data Inertial Reference Units (ADIRUs)</b>			
IR 1	AC ESS	HOT 2	Battery backup has no time limit.
ADR 1	AC ESS		If AC ESS lost, 26 VAC supply to AOA resolver lost, so ADR output flagged invalid.
IR 2	AC 2	HOT 2	<i>Current production aircraft:</i> battery backup for 5 min. <i>Older production aircraft:</i> battery backup with no time limit.
ADR 2	AC 2		If AC Bus 2 lost, 26 VAC supply to AOA resolver lost, so ADR output flagged invalid.
IR 3	AC 1	HOT 1	<i>Current production aircraft:</i> If ATT HDG SWITCHING NORM or F/O 3: battery backup for 5 min. If ATT HDG SWITCHING CAPT 3: battery backup with no time limit.  <i>Older production aircraft:</i> battery backup with no time limit.
ADR 3	AC 1		If AC Bus 1 lost, 26 VAC supply to AOA resolver lost, so ADR output flagged invalid.
<b>Display Management Computers (DMCs)</b>			
DMC 1	AC ESS		
DMC 2	AC 2		
DMC 3	AC 1	AC ESS	Backup supply in case EIS DMC SWITCHING set to CAPT 3, with AC Bus 1 failed.
<b>Display Units (DUs)</b>			
CAPT Outer DU (PFD)	AC ESS		
CAPT Inner DU (ND)	AC ESS SHED		
F/O Outer DU (PFD)	AC 2		
F/O Inner DU (ND)	AC 2		
Upper ECAM DU	AC ESS		
Lower ECAM DU	AC 2		
<b>Standby Instruments</b>			
ISIS (if installed)	DC ESS	HOT 1	HOT 1 provides power only if DC ESS lost above 50 KIAS.
STBY Horizon (if ISIS not installed)	DC ESS	HOT 1	HOT 1 standby power (if DC ESS lost above 50 KIAS) available only on aircraft with ISIS wiring provision but round dial standby instruments installed at customer option.
STBY Airspeed (if ISIS not installed)			Operated by pitot-static pressures.
STBY Altimeter (if ISIS not installed)			Operated by static pressure. Non-critical anti-friction vibration device supplied by DC ESS SHED.
DDRMI (If installed)	AC ESS		
Compass			

Equipment	Electrical Supply Bus		Notes
	Normal	Backup	
<b>Navigation Equipment</b>			
MMR (ILS + GPS) 1	AC ESS		
MMR (ILS + GPS) 2	AC 2		
VOR 1	AC ESS		
VOR 2	AC 2		
DME 1	AC ESS SHED		
DME 2	AC 2		
ADF 1 (If installed)	AC ESS SHED		
ADF 2 (If installed)	AC 2		
RA 1	AC 1		
RA 2	AC 2		
GPWS	AC 1		
Weather Radar 1	AC 1		
Weather Radar 2 (If installed)	AC 2		
Transponder 1	AC ESS SHED		
Transponder 2	AC 2		
<b>Autoflight Equipment</b>			
FMGC 1	DC ESS SHED		
FMGC 2	DC 2		
MCDU 1	AC ESS SHED		
MCDU 2	AC 2		
FCU Channel 1	DC ESS		
FCU Channel 2	DC 2		
<b>Flight Warning Computers (FWCs) and System Data Acquisition Concentrators (SDACs)</b>			
FWC 1	AC ESS		
FWC 2	AC 2		
SDAC 1	AC ESS		
SDAC 2	AC 2		