

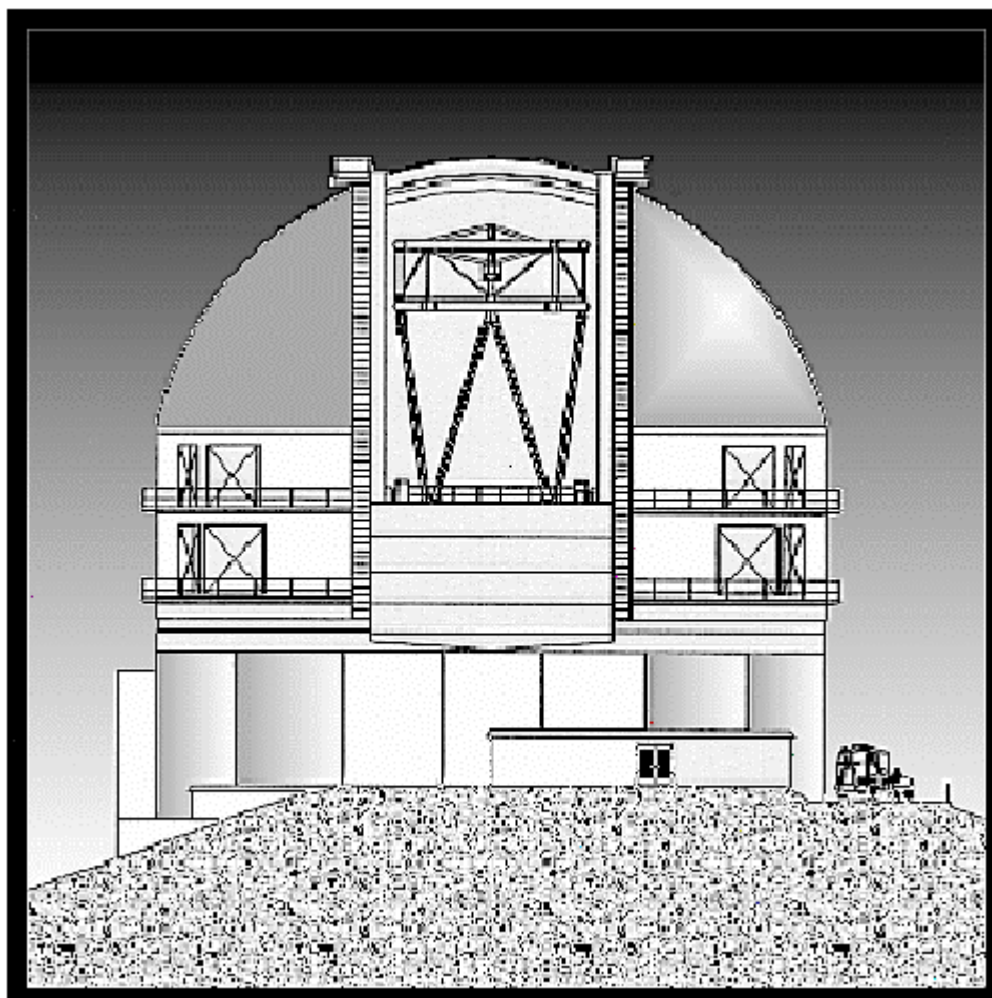
**GEMINI**

8-M Telescopes  
Project

**PG-S-G0008**

# **Gemini Acronym Glossary**

## **Version 1.1**



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## ***Gemini Acronym Glossary***

<b><i>Acronym</i></b>	<b><i>Definition</i></b>
A&G	Acquisition and Guiding
A&GCS	Acquisition and Guiding Control System
AA	Aluminum Association
aai	EPICS array analogue input record
AAMA	Architectural Aluminum Manufacturers' Association
aao	EPICS array analogue output record
AAO	Anglo-Australian Observatory
ACI	American Concrete Institute
ADAM	Astronomical Data Acquisition/Analysis Monitor
ADC	Analog to digital signal converter
Ag	Silver
ai	EPICS analogue input record
AISC	American Institute of Steel Construction, Inc.
AISI	American Iron and Steel Institute
Al	Aluminum
ALH	EPICS Alarm Handler
ao	EPICS analogue output record
aO	Active Optics
AO	Adaptive Optics
AOC-G	AURA Oversight Committee for Gemini
AOCS	Adaptive Optics Control System
APA	American Plywood Association
APD	Avalanche PhotoDiode
APS	Advanced Photon Source (at ANL)
APSS	Air Pressure Support System
AR	EPICS archiving tool
ARG	Argument structure processing routines; part of SDS
ARR	EPICS archive retrieval tool
AS	Astronomer requesting science data
ASCE	American Society of Civil Engineers
ASCII	American Standard Code for Information Interchange
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc.
ASTM	American Society for Testing and Materials
ATM	Asynchronous Transfer Mode
AtmDC	Atmospheric Dispersion Compensator
AURA	Association for Universities for Research in Astronomy
AVL	Attribute/Value Layer
AWS	American Welding Society, Inc.
BNF	Backus Naur Form
BNL	Brookhaven National Laboratory
BRDF	Bidirectional Reflectance Distribution Factor

<i><b>Acronym</b></i>	<i><b>Definition</b></i>
CA	EPICS channel access
CA client	A program that accesses an EPICS database through CA
CA server	A program that provides access to an EPICS database
CAD	EPICS command action directive
CAD	Computer Aided Design
CADC	Canadian Astronomy Data Centre
CAN	Controller Area Network
CAR	EPICS command action response
CASE	Computer-Aided Software Engineering
CATS	Collaborative Access Teams
CC	Components Controller
CCD	Charge Coupled Device
CCP	Carousel Control Panel
CCS	Configurable Control System
CDR	Critical Design Review
CEBAF	Continuous Electron Beam Accelerator Facility
CFHT	Canada-France-Hawaii Telescope
CFRP	Carbon Fiber Reinforced Plastic
CI	Configuration Item
CICS	Core-Instrument Control System
CG	Center of Gravity
CLUI	Command Line User Interface
CLS	Command Layer Server
CM	Configuration Management
CoDR	Conceptual Design Review
CP	Cerro Pachon
CR	Cassegrain Rotator
CRCS	Cassegrain Rotator Control System
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard, US Department of Commerce
CTIO	Cerro Tololo Interamerican Observatory
CVD	Chemical Vapor Deposition
DAO	Dominican Astrophysical Observatory
DBMS	Database management system
DAC	Digital to Analog Converter
DC	Direct Current
DC	Detector Array Controller
DC Offset	Constant Offset
DCT	EPICS Database Configuration Tool
DHS	Data Handling System
dec	Declination
DESY	Deutsches Elektronen-Synchrotron
DFD	Data Flow Diagram
DHS	Data Handling System

<i><b>Acronym</b></i>	<i><b>Definition</b></i>
DITS	Distributed Instrumentation Tasking System
dm	EPICS display manager tool
DM	Deformable Mirror
DOE	Distributed Objects Everywhere
DOF	Degree of Freedom
DRAL	Daresbury and Rutherford-Appleton Laboratories
DRAMA	Distributed Real-time AAO Monitor for Astronomy
DSD	Data Structure Diagram
ECS	Enclosure Control System
edd	EPICS database control screen editor
ee	Encircled Energy
EL	Elevation
EPICS	Experimental Physics and Industrial Control System
ERD	Entity Relationship Diagram
ESO	European Southern Observatory
FDDI	Fiber Distributed Data Network
FEA	Finite Element Analysis
FITS	Flexible Image Transport System
FOC	Fiber Optic Cable
FOG	Fiber Optic Gyro
FOV	Field of View
FPA	Focal Plane Array
FPRD	Functional and Performance Requirements Document
FS	Federal Specification of General Services Administration
FWHM	Full-Width at Half-Maximum
GAOS	Gemini Adaptive Optics System
GBD	Guidance and Beam Direction system (A&G)
GCS	Gemini Control System
GIS	Gemini Interlock System
GMOS	Gemini Multi-Object Spectrograph
GP	Gemini Project
GPCS	Gemini Project Controls System
GPO	Gemini Project Office
GPS	Global Positioning System
GS	Gemini system
GSC	Gemini Science Committee
GSCG	Gemini Software and Controls Group
GSCP	Gemini Software and Controls Project
GSR	Gemini Science Requirements
GTA	Ground Test Accelerator
GUI	Graphical User Interface
GWPR	Gemini Work Package Responsible
HDF	Hierarchal Data Format
HDS	Hierarchal Data System

<i><b>Acronym</b></i>	<i><b>Definition</b></i>
HOS	High-level Operations Software
HROS	High Resolution Optical Spectrograph
HRWFS	High Resolution Wavefront Sensor
HRWFS/AC	High Resolution Wavefront Sensor Acquisition Camera
I/O	Input/Output
IAW	In Accordance With
IC	Integrated Control
ICD	Interface Control Document
ICE	Inter-Client Exchange
ICS	Instrument Control System
ID	Identifier
IDL	Interactive Data Language
IEEE	Institute of Electrical and Electronic Engineers
IERS	International Earth Rotation Service
IRIG-B	Inter-Range Instrumentation Group, Standard B
IGPO	International Gemini Project Office
IMP	Interprocess Message Passing System
IOC	Input/Output Controller
IPC	Interprocess Communication
IR	Infrared
IRAF	Image Reduction and Analysis Facility
IS	Instrument Sequencer
ISDN	Integrated Services Digital Network
ISS	Instrument Support Structure
ISO	International Standards Organization
IVD	Ion-beam Vapor Deposition
JACH	Joint Astronomy Centre Hilo
JCMT	James Clerk Maxwell Telescope
JD	Julian Date
JNLT	Japanese Large National Telescope (Subaru)
KPNO	Kitt Peak National Observatory
LAN	Local Area Network
LANL	Los Alamos National Laboratory
LBL	Lawrence Berkeley Laboratory
LOS	Line of Sight
LRG	Laser Ring Gyro
LUT	Look Up Tables
M1	Primary Mirror
M2	Secondary Mirror
M3	M3 Engineering in Tucson, Arizona (not a tertiary mirror)
MCS	Mount Control System
MCSF	Mirror Cell Support Frame
MIL	Military Specification of US Department of Defense
MIR	Mid-Infrared

<i><b>Acronym</b></i>	<i><b>Definition</b></i>
MK	Mauna Kea
MOS	Multi-Object Spectrograph
MPC	Multi-point Constraint
MSBI	Major Systems Baseline Interface
NAAMM	National Association of Architectural Metal Manufacturers
N/A	Not Applicable
NCU	Node Control Unit
NDF	Extensible N-dimensional Data Format
NDI	Normalized Detector Irradiance
NEC	National Electric Code
NEMA	National Electrical Manufacturers' Association
NFPA	National Fire Protection Association
NFS	Network File System
NIR	Near-Infrared
NIRI	Near IR Imager
NIRS	Near-Infrared Spectrograph
NIST	National Institute for Science and Technology
NOAO	National Optical Astronomy Observatories
NPST	Normalized Point Source Transmittance
NSF	National Science Foundation
NTP	Network Time Protocol
NTS	Network Time Service
OB	On-site observer (may also be the astronomer)
OCC	Optical Components Controller
OCS	Observatory Control System
ODB	Observing Database
OIWFS	On-Instrument Wavefront Sensor
OPI	Operator Interface
O/S	Operating System
OSS	Optical Support Structure
OT	Observing Tool
PCRB	Program Change Review Board
PCS	Primary Mirror Control System
PDF	Packet Description File
PDR	Preliminary Design Review
PMA	Primary Mirror Assembly
PMAC	Programmable Multi-Axis Controller
PPARC	Particle Physics and Astronomy Research Council
PRS	Package Requirement Specification
PS	Product Standard of National Bureau of Standards
PSF	Point Spread Function
PSS	Passive Support System
PST	Point Source Transmittance
PTC	Primary Thermal Control

<i><b>Acronym</b></i>	<i><b>Definition</b></i>
PTP	Package Test Procedure
PVD	Physical Vapor Deposition
PWFS	Peripheral Wavefront Sensor
QA	Quality Assurance
QC	Quality Control
RA	Right Ascension
RAM	Random Access Memory
RAL	Rutherford-Appleton Laboratory (see DRAL)
RC	Richey-Chrétien
RDBMS	Relational database management system
RF	Radio Frequency
RGO	Royal Greenwich Observatory
RMS	Root Mean Squared
RO	Royal Observatories
ROE	Royal Observatory Edinburgh
ROM	Read-Only Memory
RPC	Remote Procedure Call
RSS	Root Sum Squared
RTAP	Real Time Applications Platform
RTE	Real Time Engineer
RTOS	Real Time Operating System
R <sub>x</sub>	Rotation about x axis
R <sub>y</sub>	Rotation about y axis
R <sub>z</sub>	Rotation about z axis
SAD	Status and Alarm Database
SC	Standard Controller
SCCP	Software Configuration Control Plan
SCA	Sensor Chip Assembly
SCE	Servo Control Engineer
SCS	Secondary (M2) Control System
SDD	Software Design Description
SDR	System Design Review
SDS	Self-defining Data System
SE	Sequence Executor
SEM	Scanning Electron Microscope
SHA	Seismic Hazard Analysis
SiC	Silicon Carbide
SIC	Standard Instrument Controller
SIR	Status/Information Record (EPICS)
SIS	Sub-arcsecond Imaging Spectrograph
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association, Inc.
SMP	Software Management Plan
SPIE	Society of Physical and Industrial Engineers
SPS	Software Programming Standards



<i><b>Acronym</b></i>	<i><b>Definition</b></i>
SQL	Structured Query Language
SRS	Software Requirements Specification
SSCL	Superconducting Super Collider Laboratory
SSE	System Software Engineer
SSPC	Steel Structures Painting Council
STARCAT	Space Telescope Archive and Catalog
STD	State Transition Diagram
Synchro Bus	Synchronization Bus
TAI	International Atomic Time
TBD	To Be Determined
TBP	To Be Provided
TBR	To Be Resolved
Tcl	Tool Command Language
TCS	Telescope Control System
TCP/IP	Transmission Control Protocol/Internet Protocol
Tk	Tcl Tool kit
TMS	Thermal Management System
TTL	Transistor-transistor Logic
Tx	Translation in x
Ty	Translation in y
Tz	Translation in z
UBC	Uniform Building Code
UDP/IP	User Datagram Protocol/Internet Protocol
UHV	Ultra High Vacuum
UK	United Kingdom
UKIRT	United Kingdom Infrared Telescope
UL	Underwriters' Laboratories, Inc.
ULE	Ultra Low Expansion
UOS	Unless Otherwise Specified
USA	United States of America
UTC	Coordinated Universal Time
UV	Ultraviolet
VDD	Version Description Document
Vis	Visible
VLT	ESO's Very Large Telescope
VME	A real-time system obeying the ANSI/IEEE 1014-1987 Versatile Backplane Bus Standard
VMIC	Name of Vendor of Reflective Memory for Synchro Bus
VOS	Virtual Observatory System
VSI	Virtual System Interface
VUI	Visible User Interface
VxWorks	A real-time operating system from WindRiver Systems (WRS)
WAN	Wide Area Network
WFS	Wavefront Sensor

<i><b>Acronym</b></i>	<i><b>Definition</b></i>
WHT	William Herschel Telescope
WI	Without Interruption
WiFOS	Wide Field Faint Object Spectrograph
WMKO	William M. Keck Observatories
WP	Work Package
WPM	Work Package Manager
WPR	Work Package Responsibles
WYFFOS	WHT's Wide Field Faint Object Spectrograph