



**Atacama
Large
Millimeter
Array**

ALMA Antenna Naming and Pad Identification Schemes

ANTD-36.00.00.00-004-A-GEN

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ALMA Project

Antenna/Pad

Doc # : ANTD-36.00.00.00-004-A-GEN
Date: 2007-07-12
Status:
Page: 3 of 9

Table of Contents

1 Introduction.....4
1.1 Purpose.....4
1.2 Scope and Applicability.....4
2 Related Documents and Drawings4
2.1 Applicable and Reference Documents.....4
2.2 Abbreviations and Acronyms4
3 Antenna Naming Scheme6
4 Pad Identification Scheme.....8
5 Implementation9



ALMA Project

Antenna/Pad

Doc # : ANTD-36.00.00.00-004-A-GEN

Date: 2007-07-12

Status:

Page: 4 of 9

1 Introduction

1.1 Purpose

This document describes (a) the naming scheme to be used for ALMA antennas, and (b) the identification scheme for all ALMA pads (foundations).

1.2 Scope and Applicability

This policy is applicable to the ALMA project, all partners and all ALMA contractors.

2 Related Documents and Drawings

2.1 Applicable and Reference Documents

The following is a list of documents whose content is applicable to this document, to the extent specified. If not explicitly stated differently, the latest version of the document is valid.

Applicable Doc. #	Document Title	ALMA Document Number
AD01		
AD02		

Reference Doc. #	Document Title	ALMA Document Number
RD01		
RD02		

2.2 Abbreviations and Acronyms

The list of acronyms and abbreviations used within this document are given below.


Abbreviation or Acronym	Non-abbreviated Reference
ALMA	Atacama Large Millimeter Array
AEM	Alcatel-EIE-MAN



ALMA Project
Antenna/Pad

Doc # : ANTD-36.00.00.00-004-A-GEN
Date: 2007-07-12
Status:
Page: 5 of 9

MELCO	Mitsubishi Electric Company


	ALMA Project	Doc # : ANTD-36.00.00.00-004-A-GEN Date: 2007-07-12
	Antenna/Pad	Status: Page: 6 of 9

3 Antenna Naming Scheme

ALMA will consist of antennas from multiple vendors; in addition, certain antennas will be used only in specified situations. The scheme adopted will use a four-character string to identify all antennas:

Character	Codes
1-	Array type: D: 12-m array C: 7-m array “compact” P: Total Power array “power” F: Foreign (e.g. APEX)
2-	Make/Manufacturer: A: AEM M: Mitsubishi V: Vertex O: Other...
3,4-	Antenna index: 01, 02,... Ranges: Vertex: 01..40 AEM: 41..80 MELCO 7-m: 01..12 MELCO 12-m: 01..04

Table 3.1: Antenna naming Scheme


	ALMA Project	Doc # : ANTD-36.00.00.00-004-A-GEN
	Antenna/Pad	Date: 2007-07-12 Status: Page: 7 of 9

This scheme produces the following initial set of antenna names:

- DV01...DV25** - *ALMA 12-m (Vertex) antennas*
- DA41...DA65** - *ALMA 12-m (AEM) antennas*
- CM01..CM12** - *ALMA ACA 7-m antennas*
- PM01..PM04** - *ALMA ACA 12-m TP antennas*

Example data selections:

- antenna='D*' # *gives all antennas from the bilateral array*
- antenna='C*' # *gives all antennas from the ACA array*
- antenna='DA*' # *gives all AEM antennas*
- antenna='P*' # *gives only total power antennas*
- antenna='*' # *gives all antennas*


	ALMA Project	Doc # : ANTD-36.00.00.00-004-A-GEN
	Antenna/Pad	Date: 2007-07-12 Status: Page: 8 of 9

4 Pad Identification Scheme

The current configuration plan for ALMA (11Apr2007) involves 192 pad foundations. The scheme below will use a four-character string to identify all pads:

Character	Codes
1-	<p><i>Region on site:</i></p> <ul style="list-style-type: none"> A: Inner array, including the central cluster W: Western arm of config. S: Southern arm of config. P: Pampa La Bola arm. J: ACA configuration N: North/south ACA extension T: Total Power pads
2,3,4-	<p><i>Pad index: 001, 002,...</i></p> <p><i>Current Ranges:</i></p> <ul style="list-style-type: none"> A: 001..138 W: 201..210 S: 301..309 P: 401..413 J: 501..512 N: 601..606 T: 701..704

Table 4.1: Pad Identification Scheme

	ALMA Project	Doc # : ANTD-36.00.00.00-004-A-GEN
	Antenna/Pad	Date: 2007-07-12 Status: Page: 9 of 9

This scheme allows regional identification for the western, southern and Pampa La Bola pads (with smaller numbers indicating pads closer to the configuration center), and identifies ACA-related foundations. In addition, each pad on the high site has a unique number associated with it. This scheme produces the following initial set of pad identifiers:

A001..A138	<i>Inner array, including central cluster</i>
W201..W210	<i>Western arm of the array</i>
S301..S309	<i>Southern arm</i>
P401..P412	<i>Pampa La Bola arm</i>
J500..J512	<i>ACA primary configuration</i>
N601..N606	<i>North/south extension of ACA configuration</i>
T701..T704	<i>Total Power array pads.</i>

5 Implementation

Further planning is required on how to physically label the antennas and pads; engraved plates and/or uv-resistant paint will be considered.