


NEXT ASSY	USED ON	REV	REVISION DESCRIPTION	ORIGINATOR	CHECKED	APPROVED
0226239-100 0226239-200	ADNS ADNS	-	PRODUCTION RELEASE	V. SANCHEZ 04/09/14	R. JARRETT 05/05/14	P. HOM 05/07/14
		A	REVISED PER ECN 08126	J. LACBAIN 07/02/14	R. JARRETT 07/02/14	C. MATA 07/09/14
		B	REVISED PER ECN 08149	V. SANCHEZ 07/14/14	R. JARRETT 07/14/14	R. JARRETT 07/16/14
		C	REVISED PER ECN 08510	R. SHADRICK 01/05/15	R. JARRETT 01/05/15	C. MATA 01/27/15
		D	REVISED PER ECN 08660	R. SHADRICK 06/10/15	W. DAVISON 06/10/15	C. MATA 06/10/15

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	CHECKED	R. JARRETT, 05/05/14				
	ENGINEER	C. CARTER, 05/05/14				
INTERPRET DOCUMENT IN ACCORDANCE WITH ASME Y14.100	APPROVED	P. HOM, 05/07/14	VENDOR ITEM DRAWING, ROUTER, CISCO 2901			
	APPROVED	---				
	APPROVED	---				
ALL SHEETS OF THIS DOCUMENT MAINTAINED AT THE SAME REVISION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		SIZE A	CAGE NUMBER 55910	DOCUMENT NUMBER 0226237	REV D
			SCALE N/A		SHEET 1 OF 7	

**SN: A100**

1. THE PURPOSE OF THIS DOCUMENT IS TO DEFINE THE CONFIGURATION OF THE ROUTER USED IN THIS INSTALLATION.
2. ONLY THE ITEMS DESCRIBED IN THIS DRAWING, WHEN PROCURED FROM THE VENDOR(S), OR VENDOR AUTHORIZED DISTRIBUTORS LISTED, ARE APPROVED BY THE SPACE AND NAVAL WARFARE SYSTEMS CENTER, PACIFIC 42150 NIEF. A SUBSTITUTE ITEM SHALL NOT BE USED WITHOUT PRIOR APPROVAL BY THE SPACE AND NAVAL WARFARE SYSTEMS CENTER, PACIFIC 42150 NIEF.
3. IDENTIFICATION OF APPROVED SOURCE(S) OF SUPPLY IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY FOR THE ITEM DESCRIBED IN THIS DRAWING.
4. APPROVED SOURCE OF SUPPLY:  
CISCO SYSTEMS INC. (CAGE CODE: 0GX96)  
170 WEST TASMAN DR.  
SAN JOSE, CA. 95134  
(800) 553-6387
5. THE FOLLOWING PART NUMBER(S) ARE CONTROLLED BY THIS DRAWING:

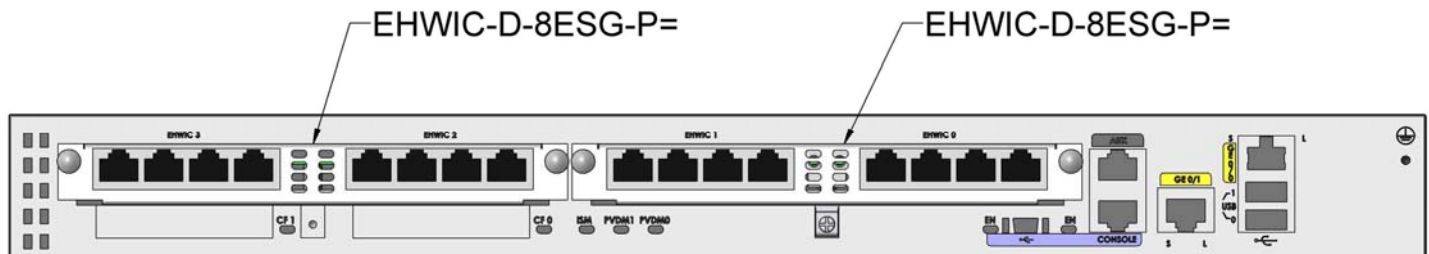
PART NUMBER	DESCRIPTION
0226237-100	ROUTER, CISCO 2901, AX, SECRET RELEASABLE
0226237-200	ROUTER, CISCO 2901, AX

	SIZE	CAGE NUMBER	DRAWING NUMBER	REV
	A	55910	0226237	D
			SHEET 2 OF 7	

## 6. ADNS ROUTER CONFIGURATIONS:

**TABLE 1. -100, SECRET RELEASABLE ROUTER**

SPAWAR PART NUMBER	0226237-100		
	ROUTER, CISCO 2901, AX, SECRET RELEASABLE		
VENDOR PN	DESCRIPTION	SLOT	QTY
C2901-AX/K9	<p>CISCO ISR 2901, WITH 2 GE / 4 EHWIC / 2 DSP, 256 MB, 2.5 GB DRAM, AX LICENSE Includes:</p> <p><b>PI-MSE-PRMO-INSRT</b> LICENSE, 30-60 DAY TRIAL, CISCO PRIME INFRASTRUCTURE  <b>SL-29-DATA-APP-K9</b> DATA FEATURES FOR 2900 SERIES APP LICENSE  <b>SL-29-SEC-K9</b> SECURITY LICENSE, PAPER, FOR CISCO 2901-2951 (BOTH SYSTEM &amp; SPARE)  <b>SL-29-IPB-K9</b> IP BASE LICENSE, PAPER, CISCO 2951-3901  <b>HWIC-BLANK</b> BLANK FACEPLATE FOR HWIC/EHWIC SLOT ON CISCO ISR  <b>FL-C2901-WAASX</b> WAASX FEATURE LICENSE (PAPER) FOR 2901  <b>SL-29-APP-K9</b> APPX LICENSE FOR CISCO 2900 SERIES  <b>MEM-2900-512U2.5GB</b> MEMORY UPGRADE, DRAM, 512MB TO 2.5GB, CISCO 2901-2921  <b>WAAS-RTU-1300</b> WAAS AND VWAAS RIGHT TO USE FOR 1300 CONNECTORS  <b>PWR-2901-AC</b> POWER SUPPLY, AC, CISCO 2901 ROUTER</p>		1
EHWIC-D-8ESG-P=	INTERFACE CARD, ENHANCED HIGH-SPEED WAN (EHWIC), GE WITH POE, 8-PORT	EHWIC 0 & 1, 2 & 3	2
MEM-CF-256U2GB	MEMORY UPGRADE, COMPACT FLASH, 256MB TO 2GB, CISCO 1900, 2900, 3900		1
SL-29-UC-K9	UNIFIED COMMUNICATIONS LICENSE, PAPER, CISCO 2901-2951 (BOTH SYSTEM & SPARE)		1
CON-SNT-C2901AX9	EXTENDED SERVICE AGREEMENT, SMARTNET, REPLACEMENT, 1-YEAR, 8 X 5 X NBD, CISCO 2901 ROUTER		1
ISR-CCP-EXP	CISCO CONFIGURATION PROFESSIONAL EXPRESS, WITH DEFAULT ROUTER INSTALLED		1
S29UK9-15403M	SOFTWARE, IOS IMAGE, UNIVERSAL 15.4(3)M, CISCO 2901-2921 ROUTERS		1
CAB-AC	POWER CORD, 110V		1

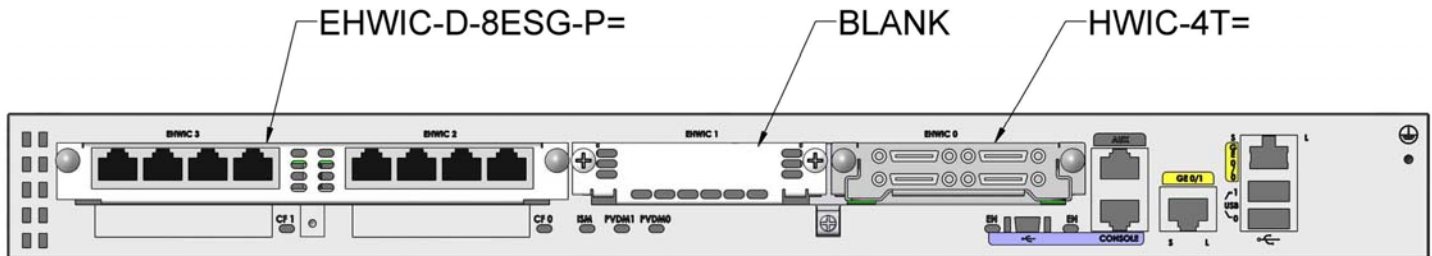


**FIGURE 1. 0226237-100, CISCO 2901 ROUTER, VIEW A-A (SHEET 5)**

	SIZE <b>A</b>	CAGE NUMBER <b>55910</b>	DRAWING NUMBER <b>0226237</b>	REV <b>D</b>
			SHEET 3 OF 7	

**TABLE 2. -200, ROUTER**

SPAWAR PART NUMBER	0226237-200		
	ROUTER, CISCO 2901, AX		
VENDOR PN	DESCRIPTION	SLOT	QTY
C2901-AX/K9	<p>CISCO ISR 2901, WITH 2 GE / 4 EHWIC / 2 DSP, 256 MB, 2.5 GB DRAM, AX LICENSE Includes:</p> <p><b>PI-MSE-PRMO-INSRT</b> LICENSE, 30-60 DAY TRIAL, CISCO PRIME INFRASTRUCTURE  <b>SL-29-DATA-APP-K9</b> DATA FEATURES FOR 2900 SERIES APP LICENSE  <b>SL-29-SEC-K9</b> SECURITY LICENSE, PAPER, FOR CISCO 2901-2951 (BOTH SYSTEM &amp; SPARE)  <b>SL-29-IPB-K9</b> IP BASE LICENSE, PAPER, CISCO 2951-3901  <b>HWIC-BLANK</b> BLANK FACEPLATE FOR HWIC/EHWIC SLOT ON CISCO ISR  <b>FL-C2901-WAASX</b> WAASX FEATURE LICENSE (PAPER) FOR 2901  <b>SL-29-APP-K9</b> APPX LICENSE FOR CISCO 2900 SERIES  <b>MEM-2900-512U2.5GB</b> MEMORY UPGRADE, DRAM, 512MB TO 2.5GB, CISCO 2901-2921  <b>WAAS-RTU-1300</b> WAAS AND VWAAS RIGHT TO USE FOR 1300 CONNECTORS  <b>PWR-2901-AC</b> POWER SUPPLY, AC, CISCO 2901 ROUTER</p>		1
EHWIC-D-8ESG-P=	INTERFACE CARD, ENHANCED HIGH-SPEED WAN (EHWIC), GE WITH POE, 8-PORT	EHWIC 2 & 3	1
SL-29-UC-K9	UNIFIED COMMUNICATIONS LICENSE, PAPER, CISCO 2901-2951 (BOTH SYSTEM & SPARE)		1
CON-SNT-C2901AX9	EXTENDED SERVICE AGREEMENT, SMARTNET, REPLACEMENT, 1-YEAR, 8 X 5 X NBD, CISCO 2901 ROUTER		1
ISR-CCP-EXP	CISCO CONFIGURATION PROFESSIONAL EXPRESS, WITH DEFAULT ROUTER INSTALLED		1
S29UK9-15403M	SOFTWARE, IOS IMAGE, UNIVERSAL 15.4(3)M, CISCO 2901-2921 ROUTERS		1
CAB-AC	POWER CORD, 110V		1
MEM-CF-256U4GB	MEMORY UPGRADE, COMPACT FLASH, 256MB TO 4GB, CISCO 1900, 2900, 3900		1
HWIC-4T=	INTERFACE CARD, HIGH-SPEED WAN (HWIC), SERIAL, 4-PORT	EHWIC 0	1



**FIGURE 2. 0226237-200, CISCO 2901 ROUTER, VIEW A-A (SHEET 5)**

SIZE	CAGE NUMBER	DRAWING NUMBER	REV
<b>A</b>	<b>55910</b>	<b>0226237</b>	<b>D</b>
SHEET 4 OF 7			

7. VENDOR DATA:

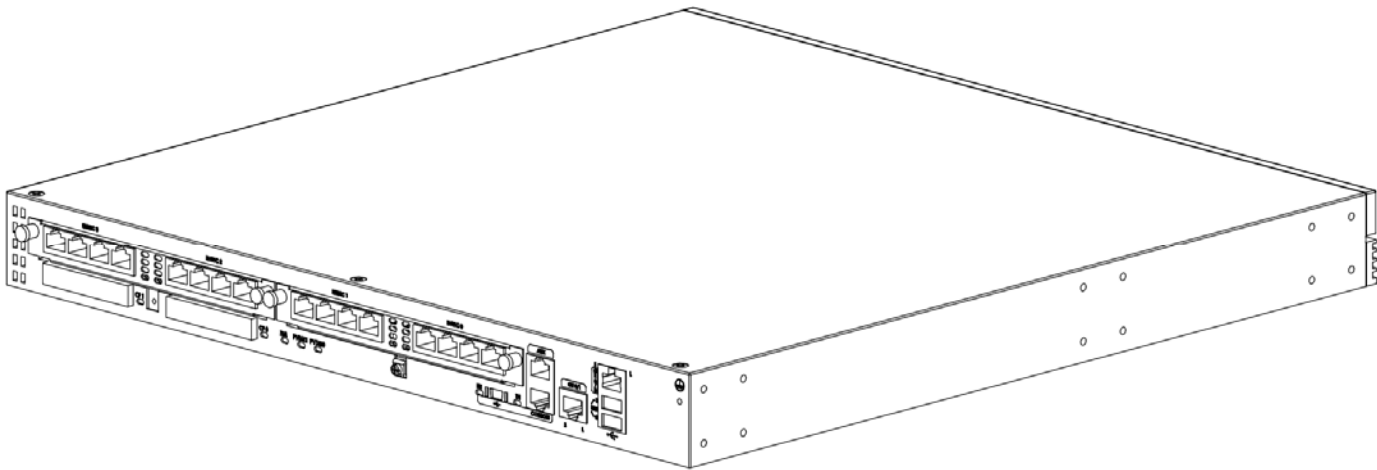


FIGURE 3: CISCO 2901 ISOMETRIC VIEW (-100 SHOWN)

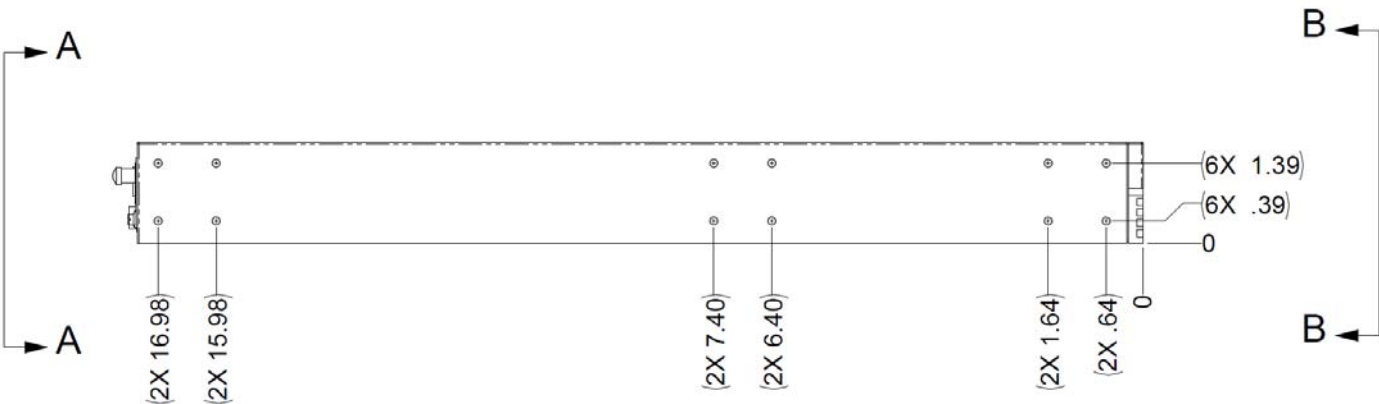


FIGURE 4: CISCO 2901 SIDE VIEW

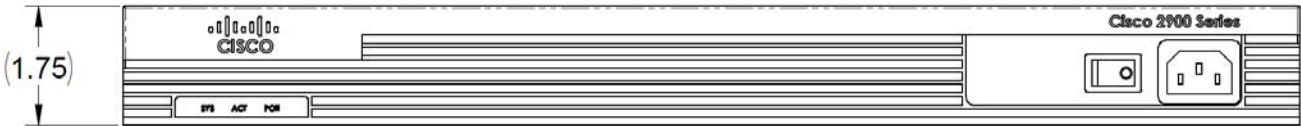
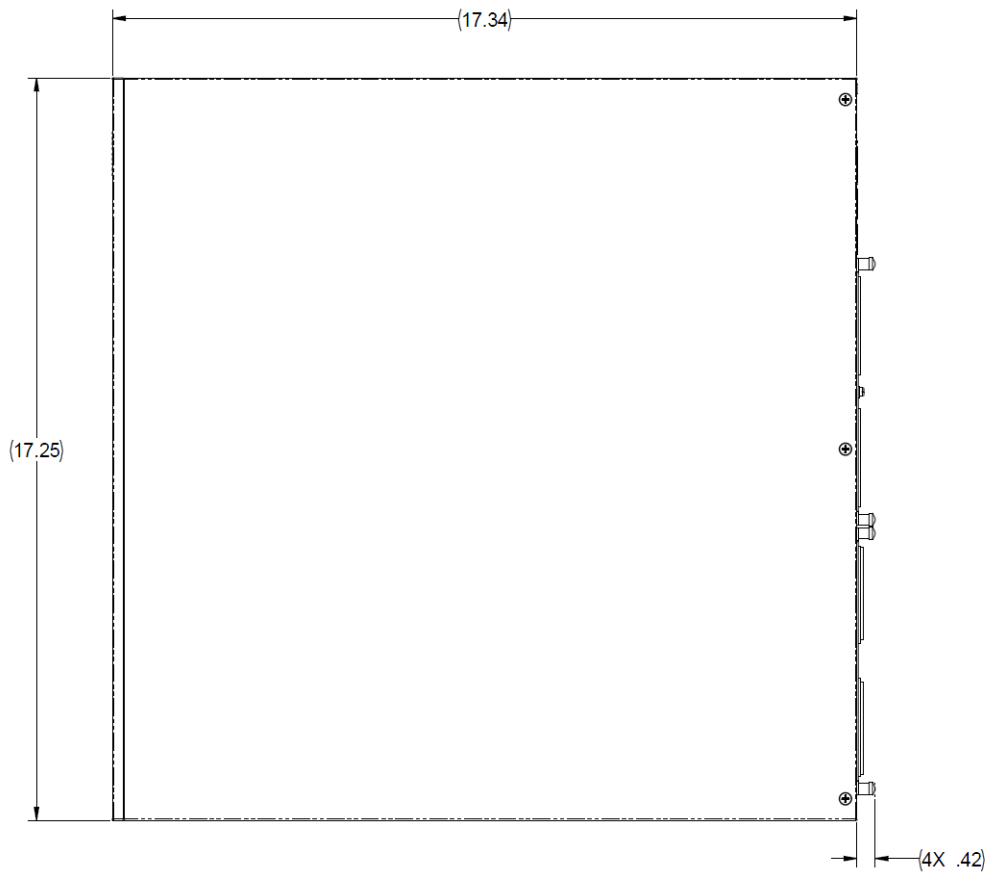


FIGURE 5: CISCO 2901 VIEW B-B

	SIZE <b>A</b>	CAGE NUMBER <b>55910</b>	DRAWING NUMBER <b>0226237</b>	REV <b>D</b>
			SHEET 5 OF 7	



**FIGURE 6: CISCO 2901 TOP VIEW**

**TABLE 3. TECHNICAL DATA**

POWER REQUIREMENTS	VOLTAGE (VAC)		100 TO 240
	PHASE		SINGLE
	FREQUENCY (HZ)		47 TO 63
	POWER FACTOR		1
	OPERATING CURRENT (A)		1.5 TO 0.6
	POWER CONSUMPTION (W)		175*
ENVIRONMENTAL	OPERATING RELATIVE HUMIDITY %		10 TO 85
	OPERATING TEMPERATURE ( ° F)	5906 FT	32 TO 104
		9843 FT	32 TO 77
	STORAGE TEMPERATURE ( ° F)		-40 TO 158
	STORAGE RELATIVE HUMIDITY %		5 TO 95
HEAT DISSAPATION (BTU/HR)	TOTAL SYSTEM		597
WEIGHT (LBS)			16.33

\* MEASURED VALUE AT 660 LAB = 75 W

	SIZE <b>A</b>	CAGE NUMBER <b>55910</b>	DRAWING NUMBER <b>0226237</b>	REV <b>D</b>
			SHEET 6 OF 7	

8. EQUIPMENT MODIFICATIONS:

THE FOLLOWING MODIFICATIONS SHALL BE MADE TO ALL HARDWARE CONFIGURATIONS IDENTIFIED WITHIN THIS DOCUMENT.

INSTALLATION OF SPAWAR PART NUMBER/IDENTIFICATION LABEL AND APPROPRIATE SPAWAR PRODUCT IDENTIFICATION LABEL SHALL BE INSTALLED ON EACH ROUTER.

IDENTIFY AND REGISTER ALL COTS EQUIPMENT VALUED OVER \$5000 OR ANY SERIALLY MANAGED COMPONENTS AND/OR SUBASSEMBLIES PER DFARS POLICY 211.2 AND 252.211-7003 WITH IUID PEDIGREE INFORMATION. LABELS MUST COMPLY TO MIL-STD-130 "IDENTIFICATION MARKING OF US MILITARY PROPERTY".

9. INSTALLATION OF ROUTER IP SOFTWARE

THE CMPRO DOCCN SHOWN IN THE TABLE BELOW CONTAINS THE ADNS NETWORK TEMPLATE WHICH REFERENCES THE IOS VERSION THAT SHALL BE INSTALLED AND CONFIGURED DURING PITCO FOR EACH PART NUMBER SPECIFIED.\*

**TABLE 4. ADNS IOS**

ROUTER PART NUMBER	VARIANT	VARIATION	*SW CMPRO DOCCN
0226237-100	AN/USQ-144K(V)2	SP3	2014-000444
0226237-200	AN/USQ-144K(V)2	SP3	2014-000444

\* LOCATE AND REVIEW THIS NETWORK TEMPLATE USING THE CMPRO DOCUMENT REPOSITORY

	SIZE <b>A</b>	CAGE NUMBER <b>55910</b>	DRAWING NUMBER <b>0226237</b>	REV <b>D</b>
			SHEET 7 OF 7	

Parts List  
Master Drawing: 0226237

Part No:			Rev:	Assembly Title				
0226237-100			D	ROUTER, CISCO 2901, AX, SECRET RELEASABLE				
Find No	Qty	U/M	Part Number	Drawing / Document	Description	Manufacturer	CAGE	Note
1	1	EA	C2901-AX/K9		CISCO ISR 2901, WITH 2 GE / 4 EHWIC / 2 DSP, 256 MB, 2.5 GB DRAM, AX LICENSE	CISCO SYSTEMS	0GX96	
2	2	EA	EHWIC-D-8ESG-P=		INTERFACE CARD, ENHANCED HIGH-SPEED WAN (EHWIC), GE WITH POE, 8-PORT	CISCO SYSTEMS	0GX96	SLOT EHWIC 2&3
3	1	EA	MEM-CF-256U2GB		MEMORY UPGRADE, COMPACT FLASH, 256MB TO 2GB, CISCO 1900, 2900, 3900	CISCO SYSTEMS	0GX96	
4	1	EA	SL-29-UC-K9		UNIFIED COMMUNICATIONS LICENSE, PAPER, CISCO 2901-2951 (BOTH SYSTEM & SPARE)	CISCO SYSTEMS	0GX96	
5	1	EA	CON-SNT-C2901AX9		EXTENDED SERVICE AGREEMENT, SMARTNET, REPLACEMENT, 1-YEAR, 8 X 5 X NBD, CISCO 2901 ROUTER	CISCO SYSTEMS	0GX96	
9	1	EA	ISR-CCP-EXP		CISCO CONFIGURATION PROFESSIONAL EXPRESS, WITH DEFAULT ROUTER INSTALLED	CISCO SYSTEMS	0GX96	(2) ON C2921-VSEC/9, (2) ON C3945E-VSEC/K9
11	1	EA	S29UK9-15403M		SOFTWARE, IOS IMAGE, UNIVERSAL 15.4(3)M, CISCO 2901-2921 ROUTERS	CISCO SYSTEMS	0GX96	
12	1	EA	CAB-AC		POWER CORD, 110V	CISCO SYSTEMS	0GX96	



Parts List  
Master Drawing: 0226237

Part No:				Rev:	Assembly Title				
0226237-200				D	ROUTER, CISCO 2901, AX				
Find No	Qty	U/M	Part Number	Drawing / Document	Description	Manufacturer	CAGE	Note	
1	1	EA	C2901-AX/K9		CISCO ISR 2901, WITH 2 GE / 4 EHWIC / 2 DSP, 256 MB, 2.5 GB DRAM, AX LICENSE	CISCO SYSTEMS	0GX96		
2	1	EA	EHWIC-D-8ESG-P=		INTERFACE CARD, ENHANCED HIGH-SPEED WAN (EHWIC), CISCO SYSTEMS GE WITH POE, 8-PORT	CISCO SYSTEMS	0GX96	SLOT EHWIC 2&3	
4	1	EA	SL-29-UC-K9		UNIFIED COMMUNICATIONS LICENSE, PAPER, CISCO 2901-2951 (BOTH SYSTEM & SPARE)	CISCO SYSTEMS	0GX96		
5	1	EA	CON-SNT-C2901AX9		EXTENDED SERVICE AGREEMENT, SMARTNET, REPLACEMENT, 1-YEAR, 8 X 5 X NBD, CISCO 2901 ROUTER	CISCO SYSTEMS	0GX96		
9	1	EA	ISR-CCP-EXP		CISCO CONFIGURATION PROFESSIONAL EXPRESS, WITH DEFAULT ROUTER INSTALLED	CISCO SYSTEMS	0GX96	(2) ON C2921-VSEC/9, (2) ON C3945E-VSEC/K9	
11	1	EA	S29UK9-15403M		SOFTWARE, IOS IMAGE, UNIVERSAL 15.4(3)M, CISCO 2901-2921 ROUTERS	CISCO SYSTEMS	0GX96		
12	1	EA	CAB-AC		POWER CORD, 110V	CISCO SYSTEMS	0GX96		
13	1	EA	MEM-CF-256U4GB		MEMORY UPGRADE, COMPACT FLASH, 256MB TO 4GB, CISCO 1900, 2900, 3900	CISCO SYSTEMS	0GX96	ALT. P/N: MEM-CF-256U4GB=	
20	1	EA	HWIC-4T=		INTERFACE CARD, HIGH-SPEED WAN (HWIC), SERIAL, 4-PORT	CISCO SYSTEMS	0GX96		

End of List

