



दूरसंचार विभाग, भारत सरकार


DEPARTMENT OF TELECOMMUNICATIONS, GOVERNMENT OF INDIA

दूरसंचार अभियांत्रिकी केंद्र

TELECOMMUNICATION ENGINEERING CENTRE

**CERTIFICATE OF MANDATORY CONFORMANCE**

**This is to certify that the product described below conforms to the Essential Requirement issued by TEC under Mandatory Testing and Certification of Telecom Equipment as notified vide Indian Telegraph (Amendment) Rules, 2017.**

<b>i.</b>	<b>*Certificate No.:</b> 379402330	<b>ii.</b>	<b>Dated:</b> 24-Jul-2024
<b>iii.</b>	<b>Certificate Category:</b> Regular	<b>iv.</b>	<b>Certificate Type:</b> NEW
<b>v.</b>	<b>APPLICANT:</b> Belden India Private Limited, Unit No 233-236 2nd floor Spazende Tower B Sohna RoadSector 47 Gurugram Haryana 122002	<b>vi.</b>	<b>ORIGINAL EQUIPMENT MANUFACTURER:</b> Hirschmann Automation and Control GmbH, Stuttgarter Str. 45-51, 72654 Neckartenzlingen / Germany
<b>vii.</b>	<b>PRODUCT NAME:</b> LAN Switch	<b>viii.</b>	<b>PRODUCT VARIANT:</b> L3 LAN Switch
<b>ix.</b>	<b>PREVIOUS CERTIFICATE NO.:</b> NA	<b>x.</b>	<b>PREVIOUS CERTIFICATE ISSUED DATE:</b> NA
<b>xi.</b>	<b>MODEL NO.:</b> GRS106	<b>xii.</b>	<b>FAMILY NAME:</b> NA
<b>xiii.</b>	<b>ASSOCIATED MODEL NO.:</b> As given at Table-1 overleaf	<b>xiv.</b>	<b>INTERFACES TESTED:</b> As given at Table-2 overleaf
<b>xv.</b>	<b>SOFTWARE VERSION:</b> HiOS 09.4.03	<b>xvi.</b>	<b>HARDWARE VERSION:</b> Z04S08
<b>xvii.</b>	<b>VALID FROM:</b> 24-Jul-2024	<b>xviii.</b>	<b>VALID UPTO:</b> 23-Jul-2034
<b>xix.</b>	<b>ER NO.:</b> TEC37942407	<b>DIRECTOR (TC-1)</b> <b>K L Bhawan,</b> <b>Janpath, New Delhi - 110001</b>	
<b>xx.</b>	<b>EMI / EMC CLASS:</b> A		
<b>xxi.</b>	<b>QR CODE:</b> 		

**Note:**

- \*1. This certificate is valid for product(s) manufactured in Germany and India only, as per the details at Table-3.*
- 2. This certificate is issued for model/family name indicated at (xi) above and applicable for associated/ family model(s) mentioned at Table-1, overleaf only.*
- 3. Bill of Material covered under this certificate is given at Table-4.*
- 4. Terms & Conditions mentioned at MTCTE portal (<https://www.mtcte.tec.gov.in/>) shall be applicable.*

Table-1

List of Associated/Family Models	
i.	GRS105
ii.	GRS104



Table-2

List of Interfaces Tested	
i.	10 100 1000 BASE-T Ethernet
ii.	10 G Optical Ethernet
iii.	1 G Optical Ethernet



Table-3

List of manufacturing locations (as declared by the applicant) for which this certificate (No. 379402330) is valid:								
S. No.	Product Model number	Contract Manufacturing	Manufacturing Location Address	Contact Person Name (Plant Incharge)	E-mail-ID	Contact number	*Country Of Origin	**Country of Manufacturing
1	GRS106	No	Hirschmann Automation and Control GmbH Stuttgart Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
2	GRS106	No	Belden India Private Limited Plot No D2281 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	avinash.pawar@belden.com	91895698023	India	India
3	GRS105	No	Hirschmann Automation and Control GmbH Stuttgart Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
4	GRS105	No	Belden India Private Limited Plot No D2281 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	avinash.pawar@belden.com	91895698023	India	India
5	GRS104	No	Hirschmann Automation and Control GmbH Stuttgart Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
6	GRS104	No	Belden India Private Limited Plot No D2281 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	avinash.pawar@belden.com	91895698023	India	India

Note: \*1. Country of Origin is as per the criteria defined under Custom Rules.

\*\*2. Country of Manufacturing refers to the place where the Telecom product under certification against product model number given above is manufactured/assembled as complete unit only.

Table-4

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)									
Module Name/Attribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks	Module present in Main Model	Module present in Associated model-1	Module present in Associated model-2
Module No.							GRS106	GRS105	GRS104
EMI/EMC Class of equipment: A	GRS106					The primary difference between main model and associated model is the number of interfaces & Speed of the Ports.	Y	Y	Y
PCB Motherboard	752060001	Z04S08	HiOS 09.4.03				Y	Y	Y
Microprocessor	Broadcom / BCM56160		HiOS 09.4.03				Y	Y	Y
10G Ethernet Optical	752060001	Z04S08				SFP+ slots for 10Gbits/s F/O connections	Y	N	N

**Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)**

Module Name/Attribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks	Module present in Main Model	Module present in Associated model-1	Module present in Associated model-2
						(SR, LR, ER) Total no. ports = 06 For GRS106= 6 For GRS105=0 For GRS104=0			
1G Ethernet Optical	752060001	Z04S08				SFP slots for 1Gbits/s F/O connections (SX, LX) Total no. ports = 06 For GRS106= 6 For GRS105=6 For GRS104=6	Y	Y	Y
100/1000Mbi	752060001	Z04S08				RJ45 socket	Y	Y	Y

**Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)**

Module Name/Attribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks	Module present in Main Model	Module present in Associated model-1	Module present in Associated model-2
ts/s Electrical						for 100/1000Mbits/s twisted pair connection Total No of ports = 16 + 8 For GRS106=16 + 8 For GRS105=16 + 8 For GRS104=16 + 8			
PSU-L	837670201					Low Voltage DC PSU - 24 to 48 Vdc	Y	Y	Y
PSU-M/G	837669201					High Voltage DC PSU -	Y	Y	Y

**Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)**

Module Name/Attribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks	Module present in Main Model	Module present in Associated model-1	Module present in Associated model-2
						110 to 250 Vdc High Voltage AC PSU - 110 to 240Vac			

\*\*\* End of the certificate\*\*\*