

No. IV-21011/9/2009-Prov-I
Government of India
Ministry of Home Affairs

26, Man Singh Road, Jaisalmer House,
New Delhi, 18.5.2009

To
The DGs: Assam Rifles/BSF/CISF/CRPF/ITBP/NSG/SSB/BPR&D

Subject:- Technical Specifications/QRs of the Hospital Equipments

The Technical Specifications/QRs of the following Hospital Equipments as per Annexures, have been accepted by the Competent Authority in MHA:-

1	Digital Tabletop B Class Dental Autocalve
2	Digital X-Rays Machine for 50 beded Hospital
3	Advance Electro Therapy Unit, Combination Therapy Equipment with Electro Therapy with Ultrasound & Laser Therapy & Vacuum.
4	Whole Body Vibration Unit
5	High Frequency Shortwave Diathermy
6	Tens & Stimulator
7	Continuous Passive Motion(For upper Limb & Lower Limb)
8	Contrast bath(Hot & Cold)

2. Henceforth, all the CPMFs should procure the above items required by them strictly as per the laid down Technical Specifications/QRs.

18/05/09

(R.S.Sharma)
Director (Prov)

Copy to:-

DD(Procurement),MHA

Copy for information to:-

PS to JS(PM),MHA

Copy also to:- The ADG(Med),
Central Paramilitary Force Medical Services,
Ministry of Home Affairs,
ITBP CASMP,
TIGRI,
P.O. Madangir,
New Delhi-110062.

Issued.
18/5/09

**QRs for Advance Electro Therapy Unit, Combination Therapy Equipment with
Electro Therapy with Ultrasound & Laser Therapy & Vacuum**

The Unit should have the following features:-	
1	Therapies:- Electro therapy, w and 4 poles, 2 channels completely independent. Ultra sound therapy Simultaneous therapy(2 different indications treated simultaneously by using electro and ultrasound therapy) Combination therapy (treating one injury simultaneously using a combination of electro and ultrasound therapy. Laser therapy
2	ULTRASOUND
3	Laser : (The probes are optional)02 probe:- Monoprobe P43: mono probe Clusterprobe P45: cluster probe(4 diodes) Combination therapy unit for 2-channel electrotherapy, ultrasound, and Laser therapy with unique guided therapy system for objective based therapy
i	Electrode placement and help & information key on screen.
ii	More than 26 different current forms: namely MF rectangular, Rectangular pulse, Triangular, 2-5 current (Ultra Reiz), MF, DF, CF, CP-ISO, LP, LP-ISO, Conventional Tense, Low Frequency Tense, Random frequency Tense, Burst Tense, Han Stim, Rectangular surge, Triangular surge, Symmetrical Biphasic Surge, a- symmetrical Biphasic Surge, Intrapulse Interval Surge Symmetrical, Russian Stimulation, 2-pole MF Surge, Classical Interferential surge, Isoplanar Vector field surge, 2-pole MF, Dipole Vector field & Isoplanar vector field.
iii	More than 260 pre-programmed protocols.
iv	Must have 50 free programmed treatment memory.
v	Combination of Ultrasound Therapy & Electrotherapy unit.
CARRIER WAVE FREQUENCY 2-10 KHz IN STEPS OF 100 Hz FOR RESEARCH PURPOSES:	
i	Frequency - 1 & 3 MHz in single head for deep & superficial treatment.
ii	Both pulsating and continuous output mode: 10%, 20%, 30%, 40%, 50% & 100%
iii	Output coupled to contact control
iv	Acoustic & visual contact
v	Simultaneous therapy, 2 different indications treated simultaneously by using electro and ultrasound therapy
LASER THERAPY	
i	Should have facility for automatic calculation of dosing parameters and facility to set treatment area
ii	Facility to accumulate total energy to be used in semi-stationary method
iii	LCD display to simultaneously displays: The probe in use, Pulse repetition frequency, Energy density, Total energy & Surface area under treatment
iv	Should have in built laser tester
SHOULD PROVIDE:	
Number of laser diodes	1 (Monoprobe)
Nominal Ocular hazard distance	214 mm
Wave Length	905 nm
Energy per pulse	2.35µJ
Peak performance	13.5 W
Maximum average power	70.5mW
Pulse frequency	2 to 30 kHz.
Pulse width at 50% of the peak power	155 ns
Beam surface at laser aperture	12.9 m x sqm
Beam divergence	Dual mode 10 degree and 45 degree
Alongwith standard accessories and Optional accessories i.e. Bag(Carrying case), US Head, multi frequency (1 and 3 MHz), 1cm ² vaginal probe, Electrode rubber 4x6 Cm (per 2), Electrode rubber 8x12 cm (per2), Electrode adhesive Ø 3 cm (per 4), Electrode adhesive, 2,5 x 5 cm (per 4), Electrode adhesive, 5 x 5 cm (per 4)	